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NATIONAL WEATHER SERVICE CHEYENNE, WYOMING



Products and Services Guide

U.S. DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric
Administration
National Weather Service
Cheyenne, Wyoming
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<http://www.crh.noaa.gov/cys/>

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INTRODUCTION

This guide was designed by the National Weather Service (NWS) as a ready reference for emergency managers, media and other users in southeast Wyoming and western Nebraska. It contains information on various types of weather, hydrologic forecasts and warning products, fire weather forecasts, and includes examples of their headings and content. There are also definitions of frequently used terms as well as guidance on the various means of receiving NWS products and services.

The NWS in Cheyenne has gone through considerable change since 1995, adding new and improved forecast products, state-of-the-art computer systems, additional staff, and has expanded warning and forecast responsibilities. We intend to produce updated sections to this guide on at least an annual basis. If your telephone number or address changes, please be sure to let us know so you can keep your copy of this guide up to date.

As of November 2002, the NWS in Cheyenne has long fused weather watch and warnings and short fused weather warning and hydrologic responsibility for seven (7) counties in southeast Wyoming and eight (8) counties in western Nebraska. If you need weather information of any kind, contact the NWS in Cheyenne using the following phone number: 307-772-2468

If you have questions or comments on this guide or any NWS product or service, please call the NWS in Cheyenne at 307-772-2468. The Meteorologist in Charge (MIC), William Parker, the Warning Coordination Meteorologist

(WCM), John Griffith, and the entire WFO Cheyenne staff will be glad to answer any of your questions.

TELEPHONE NUMBERS AND EMAIL ADDRESSES

NATIONAL WEATHER SERVICE OFFICE

1301 Airport Parkway
Cheyenne, WY 82501

Administrative calls: 307-772-2468 Fax: 307-772-2099

NAME E-MAIL ADDRESS

William T. Parker william.parker@noaa.gov
MIC (Meteorologist In Charge)
John Griffith John.Griffith@noaa.gov
WCM (Warning Coordination Meteorologist)
David Copley David.Copley@noaa.gov
SOO (Science and Operations Officer)
Valerie Scheele Valerie.Scheele@noaa.gov
AA (Administrative Assistant)
Arthur Hutcheon Arthur.Hutcheon@noaa.gov
DAPM (Data Acquisition Program Manager)
Ray Gomez Ray.Gomez@noaa.gov
SH (Service Hydrologist)

The following number can be used by the general public:

Public Line: 307-635-9901 (recording)
772-2468 (admin)

MEDIA AND EMERGENCY MANAGERS 24 HOUR ACCESS

____ - _____ (emergency coordination only)

Contact the Cheyenne office to gain approval for 24 hour access by calling 307-772-2468 ext 642 (M-F, 8AM – 430PM, excluding holidays)

WFO Riverton, WY Media and EM Number 307-857-3898
WFO Rapid City, SD Media and EM Number 605-341-9271
WFO North Platte, NE Media and EM Number 308-532-4936
WFO Denver/Boulder, CO Media and EM Number 303-494-4479

1) Meteorologists-In-Charge Who Serve Adjacent Forecast Areas:

WFO Riverton

Joe Sullivan 307-857-3898 joe.sullivan@noaa.gov

WFO Rapid City

Dave Carpenter 605-341-9271 dave.carpenter@noaa.gov

WFO Denver/Boulder

Larry Mooney 303-494-3210 Larry.Mooney@noaa.gov

WFO North Platte

Brian Hirsch 308-532-4936 Brian.Hirsch@noaa.gov

2) Warning Coordination Meteorologists Who Serve Adjacent Forecast Areas:

WFO Riverton

Chris Jones 307-772-2468 chris.jones@noaa.gov

WFO Rapid City

Susan Sanders 605-341-9271 Susan.Sanders@noaa.gov

WFO Denver/Boulder

Bob Glancy 303-494-3210 Robert.Glancy@noaa.gov

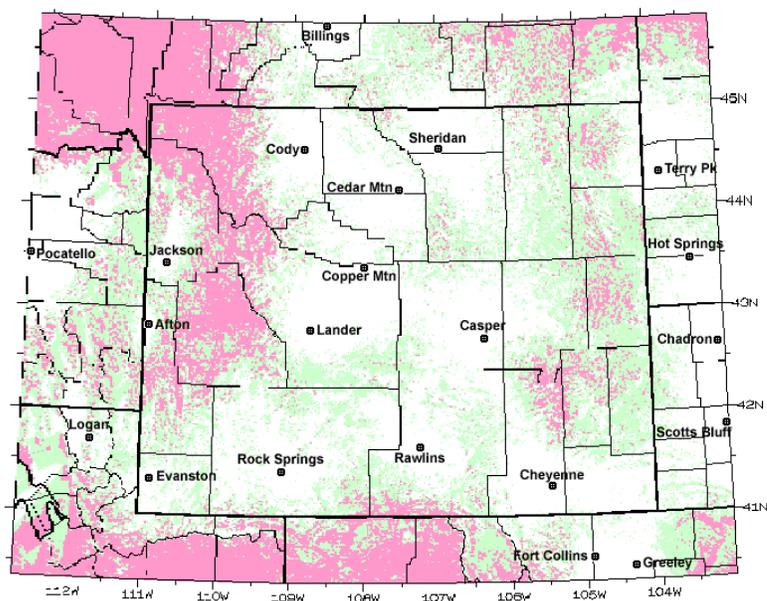
WFO North Platte

Debra Blondin 308-532-4936 Debra.Blondin@noaa.gov

Mass Media Dissemination

The NWS disseminates weather products to media customers utilizing news services such as the Associated Press as well as through private vendors. The products are identified using World Meteorological Organization (WMO) headers as of November 1, 2000. For example: FPUS55 is a Wyoming Zone Forecast.

NOAA Weather Radio



NOAA weather radio (NWR) consists of NWS and privately owned radio transmitters that broadcast the latest weather and hydrologic information directly from NWS offices for various listening areas. These transmitters utilize one of seven frequencies in the 162 MHz range (Marine Band). Weather messages are recorded in a program that repeats approximately every 4 to 6 minutes and includes the latest forecasts and warning for the listening area. Radio receivers can be purchased from various electronics stores, generally from \$25 to \$75. Higher price radio provided added features which include remote warning activation and selected area message encoding, which allow the user to tailor his level of service need.

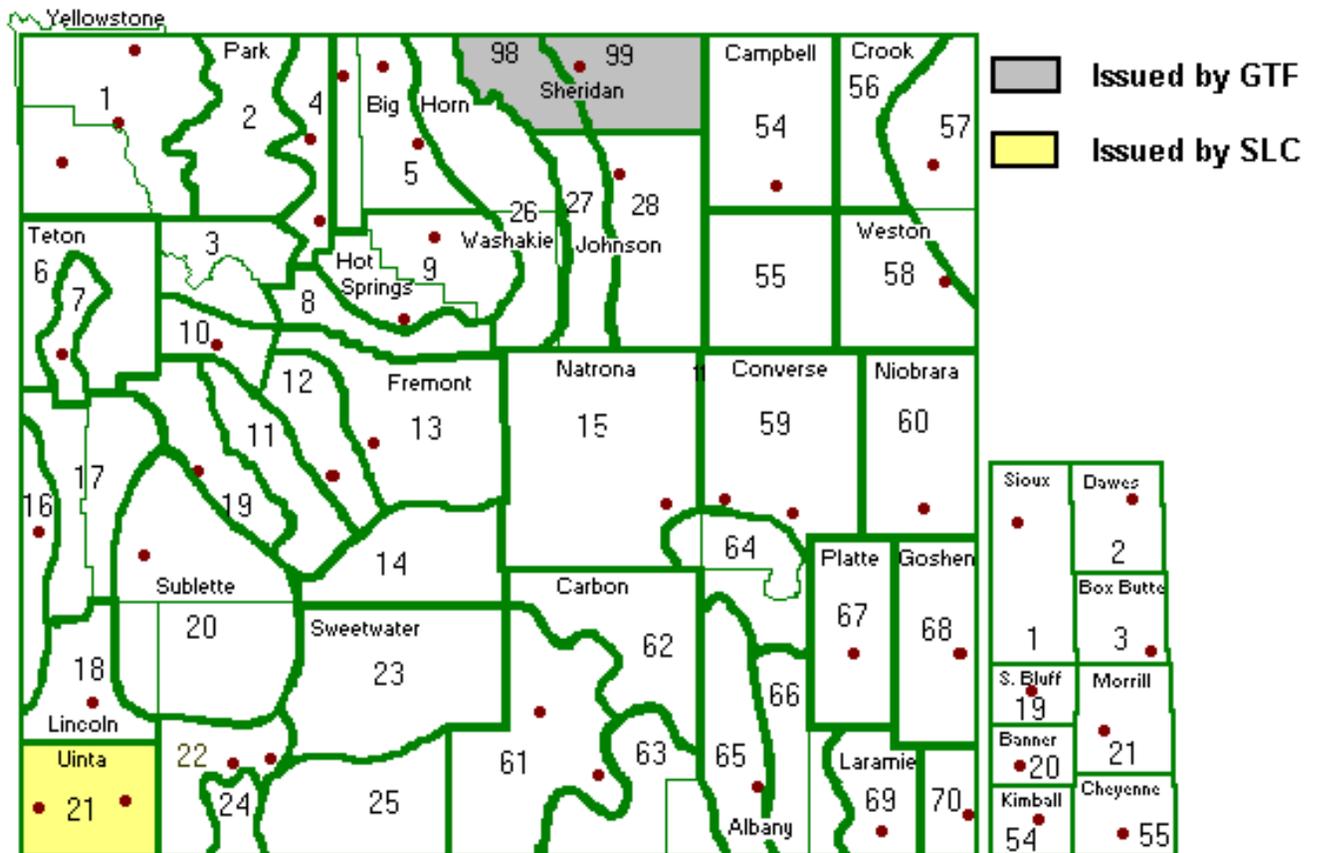
During severe weather events, the NWS can pre-empt the routine weather broadcasts and substitute special warning messages. When life threatening weather is anticipated, the NWS can also activate specially designed warning receivers. These receivers either sound an alarm to indicate that an emergency exists, or they are automatically turned on so that the warning message is heard. An alert system to selectively notify customers for specific areas and types of warnings is in place and receivers are being developed and marketed.

Commercial radio and TV stations are authorized to rebroadcast any material transmitted over NWR.

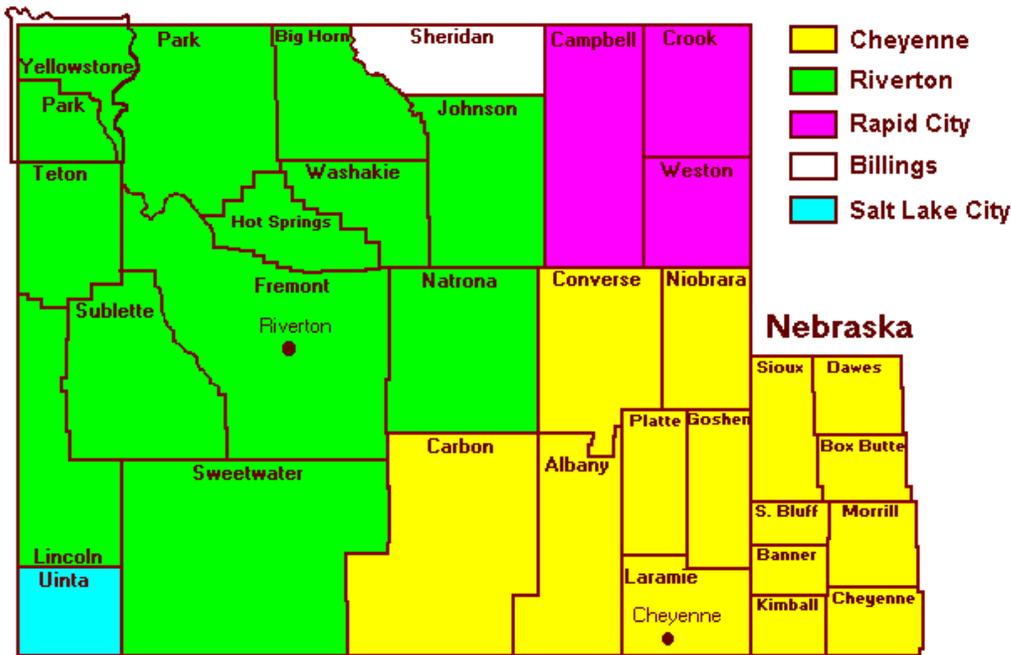
The NWR broadcasts can usually be heard as far as 40 miles from the antenna site. The effective range depends on many factors, particularly the height of the broadcast antenna, terrain, quality of the receiver, and type of receiving antenna. The displayed map shows the estimated coverage of NWR transimison (light areas) as of November 2002. The Cheyenne office, as of October 2001, operates three (5) NWR transimtters. A sixth site is still in the works, south of Lusk and north of Wheatland with no estimated date of completion.

- | | |
|---|--|
| <ul style="list-style-type: none"> • Cody, Wy 162.400 mhz. • Cedar Mountain, Wy • Sherman Hill (Cheyenne and Laramie) 162.550 mhz. • Casper Mountain 162.400 • Angora, NE 162.475 • Rawlins 162.425 • Rock Springs 162.550 • Lander 162.475 • Sheridan 162.475 • Bassett, NE 162.475 • North Platte, NE 162.550 • Glendo, Wyoming 162.450 | <ul style="list-style-type: none"> • Fort Collins, CO 162.450 • Denver, CO 162.550 • Grand Junction, CO 162.550 • Greeley, CO 162.400 • Longmont, CO 162.475 • Sterling, CO 162.400 • Evanston 162.450 • Scotts Bluff, NE 162.475 • Chadron, NE 162.525 • Sidney, NE 162.450 • Afton, Wy 162.425 mhz. • Copper Mountain, Wy 162.425 mhz. • Jackson, Wy 162.525 mhz. |
|---|--|

Wyoming and NE Panhandle Zones



County Warning Areas



WFO County Warning Areas

WFO - Warning and Forecast Office: Cheyenne, WY
 Riverton, WY, Rapid City, SD, Billings, MT, Salt Lake City, UT, North Platte, NE

NCEP - National Center for Environmental Prediction in Washington D.C.

SPC - Storm Prediction Center in Norman, OK

HPC - Hydrometeorological Prediction Center in Washington D.C.
 COMMUNICATIONS OF WEATHER PRODUCTS

National Warning System (NAWAS)

Funded by the Federal Emergency Management Administration (FEMA), the National Warning System (NAWAS) is a comprehensive party-line network of telephone circuits connecting more than 1,500 state and federal warning points throughout the United States. Although NAWAS is a national system, the day to day operation is under the control of individual states. Each state has its own plan for the use of NAWAS during weather emergencies.

NAWAS is used to warn the public, through local governments, about potential loss of life and/or property. Such threatening situations are not limited to weather or hydrologic events. The warning message can also include information on dam breaks, earthquakes, volcanoes, major fires and other civil emergencies. The NWS in Cheyenne uses NAWAS to relay severe weather warnings to counties that have NAWAS coverage.

Emergency Managers Weather Information Network (EMWIN)

The Emergency Managers Weather Information Network (EMWIN) is a system that provides the emergency management community with access to a set of NWS warnings, watches, forecasts, and other products at no

recurring cost. The data is received free of charge using a small dish satellite receiving system connected to a home or office personal computer. The data is accessed and displayed using windows based point and click software. The latest weather and flood warnings, watches, forecasts, statements, observations and other data are automatically stored, along with some weather graphics like the radar summary and some satellite imagery. The data are available nation wide directly from satellites and the system can be purchased by anyone. For more information, access the EMWIN home page at the address shown below or contact the NWS in Cheyenne.

<http://www.nws.noaa.gov/emwin/index.htm>

Emergency Alert System (EAS)

The Emergency Alert System (EAS) is a national system developed by the Federal Communications Commission (FCC), allows the NWS and others access to commercial radio and television stations for announcing emergency messages to the public. The NWS in Cheyenne has direct access to this system. Specific Area Message Encoders (SAME) have been installed on the current NOAA Weather Radio system that allow for transmitted tones to directly trigger radio and television station EAS equipment. It is important for emergency managers to develop local EAS plans that ensure that radio and television stations within their county monitor NWR or the AP wire which may also trigger the EAS when a severe weather warning is issued. With the hardware and procedures in place, weather related and other EAS broadcasts will reach the public in a timely manner. The NWS will utilize EAS to warn the public of major life threatening, short fused and/or severe weather events.

Media and EM Communications to the NWS

A hotline has been established to allow immediate two way communications between the NWS in Cheyenne and the media or emergency managers. This line should be used when it is critical to relay severe weather information to the NWS or to obtain additional information on weather warnings or severe weather events.

Emergency Management and Media Hotline..... 307-772-_____(emergency only. Do not give out.)

Climate Information

Every NWS office can answer general climate requests concerning their area of responsibility. However, extensive research efforts and/or climate data requests for outside the area are referred to either the National Climatic Data Center in Asheville, NC, the Western Regional Climate Center in Reno, NV or the High Plains Climate Center in Lincoln, NE.

National Climatic Data Center
151 Patton Ave.
Asheville, North Carolina
28801-5001
Voice 704-271-4800
Fax 704-271-4876
<http://www.ncdc.noaa.gov>

Western Regional Climate Center
Desert Research Institute
2215 Raggio Parkway
Reno, NV 89512
Voice 775-674-7010
Fax 775-674-7016
<http://www.wrcc.dri.edu>

High Plains Climate Center
Depart. of Ag. Meteorology
L.W. Chase Hall
P.O. Box 830728
Lincoln, NE 65883-0728
Voice 402-472-6709
<http://hpccsun.unl.edu>

Private Meteorological Information Firms

For a listing of commercial meteorological vendors, access the following page on the Internet:

<http://www.nws.noaa.gov/im/more.htm>

or call NWS Headquarters Industrial Meteorology Office at 301-713-0258

Internet Access

The Internet is considered to be a fundamental communications tool that may be used to help support the mission of the NWS through expanding information dissemination methods. The NWS maintains a current database of meteorological and hydrological data, historical data, and written information generated by NWS offices or received from other official sources. Information such as weather observations, forecasts, maps, satellite, and radar imagery can be accessed by using the internet, as well as experimental products intended for research. Before using information obtained from the internet, give special attention to the date and time of the data and products being displayed.

Note: The Internet is not an official source for NWS weather information, because the NWS can not guarantee the timeliness or availability of this information by Internet service providers.

Internet Addresses:

1) WFO Cheyenne Home Page

<http://www.crh.noaa.gov/cys/>

2) NWS Headquarters

<http://www.nws.noaa.gov/>

3) University Weather Sites

<http://www.met.utah.edu/links.html>

4) Private Weather Companies

<http://www.nws.noaa.gov/im/more.htm>

5) NWS Interactive Weather Information Network (IWIN)

<http://iwin.nws.noaa.gov/iwin/main.html>

The NWS is using the Internet as a medium to disseminate weather information. However, no NWS office can guarantee the timeliness of information posted on home pages. By no means should the Internet be considered a reliable source of information for short-fused or rapidly changing weather situations. Individuals should continue using NOAA Weather Radio, the NOAA Weather Wire Service, or local media for rapid updates of weather information. No link to, nor mention of, a particular Internet site or vendor constitutes an endorsement of said products or vendor by the NWS.

Winter Storm Watch, Warning, or Advisory

NWS Product Headers

NWS Product/Headers Zone Forecast (Public)/ FPUS55 KCYS	NWS Product/Headers Short Term Forecast FPUS75 KCYS	NWS Product/Headers Daily Climatic Summary (Cheyenne or Scottsbluff) CDUS45 KCYS	NWS Product/Headers Monthly Climatic Summary CSUX55 KCYS (Cheyenne) CSUS53 KCYS (Scottsbluff)
Forecast Discussion / FXUS65 KCYS FXUS65 KRIW FXUS63 KRAP FXUS63 KLBF	State Weather Roundup ASUS45 KCYS	State Temperature and Precipitation Table ASUS55 KCYS	Public Information Statement NOUS45 KCYS
Record Event Report SXUS99 KCYS	Free Text Message NOUS65 KCYS	State Weather Summary AWUS45 KRIW ASUS55 KCYS	Non-Precipitation Watch, Warning, or Advisory WWUS75 KCYS
Winter Storm Watch, Warning, or Advisory WWUS45 KCYS	Special Weather Statement WWUS35 KCYS	Hazardous Weather Outlook WWUS35 KCYS	Severe Weather Watch WWUS65 KCYS WWUS32KOMA
Tornado Warning WFUS55 KCYS	Severe Thunderstorm Warning WUUS55 KCYS	Severe Weather Statement WWUS34 KCYS	Local Storm Report WWUS30 KCYS
Fire Weather Forecast FNUS55 KCYS	Fire Weather Spot Forecast FNUS75 KCYS	Fire Weather Watch/Red Flag Warning WWUS85 KCYS	Flood Potential Outlook FGUS75 KCYS
Mainstem River Flood Watch FGUS65 KCYS	Flash Flood Watch FGUS65 KCYS	Mainstem River Flood Warning FGUS45 KCYS	Mainstem River Flood Statement RWUS42 KCYS
Mainstem River Statement FGUS85 KCYS	Urban & Small Stream Advisory RWUS42 KCYS	Flash Flood Warning WGUS55 KCYS	Flash Flood Statement WGUS75 KCYS
Extended Outlook FEUS75 KCYS	State Forecast Tablature FPUS65 KCYS		

TERMS AND DEFINITIONS Meteorological and Hydrologic Terms and Definitions

BANKFULL - An established river stage/elevation at a given location along a river which is intended to represent the maximum safe water level that will not overflow the river banks or cause any significant damage within the river reach.

BASIN - A whole geographic area having a common outlet (such as a river, stream or lake) for its surface runoff. Also known as "drainage area" or "watershed".

BLOWING DUST OR SAND - Small particles of dust or sand caused by strong winds blowing over dry ground, that has little or no vegetation.

BLIZZARD - A storm with considerable falling and/or blowing snow, lasting 3 hours or longer with sustained winds or frequent gusts to 35 mph or greater and/or visibilities less than 1/4 mile.

BLOWING SNOW - Wind-driven snow which reduces surface visibility.

CREST - The highest stage or level of water at a specific point before the water begins to recede.

DOWNBURST - A strong downdraft of air, usually associated with a thunderstorm, which induces an outburst of damaging winds on or near the ground.

DRIFTING SNOW - An uneven distribution of snowfall/snow depth caused by strong surface winds, but does not reduce surface visibility.

DRIZZLE - Liquid precipitation composed of very small, uniformly dispersed water droplets. Drizzle appears to float while following air currents; however unlike fog droplets, it falls to the ground. Drizzle drops are too small to disturb appreciably still water puddles.

FLASH FLOOD - A flood caused by water which rises rapidly from normal level (or completely dry) to inundation within 6 hours.

FLOOD - Any relatively high streamflow that overtops the natural bank of the stream channel and/or causes property damage.

FLOOD STAGE - The elevation at which overflow of the natural banks of a waterway begins to cause damage or presents a flood-damage hazard near the gage where the elevation is measured. This can also be expressed in terms of a FLOOD FLOW.

FLOW - The volume of water that passes through a point of a river during a given time. Usually expressed in cubic feet per second (cfs).

FOG - Water droplets which are suspended in the air near the earth's surface causing reduced visibilities.

FORECAST PERIODS - Routine forecasts issued after midnight and before noon contain three forecast periods: today, tonight, and the next day. Routine forecasts issued after noon and before midnight contain four forecast periods: tonight, the next day, the next night, and the following day.

NOTE: Today is the period from the time the product is issued until 6:00 pm MST or MDT. Tonight is the period from when the product is issued until 6:00 am MST or MDT.

FREEZE - When the temperature at or near the surface is expected to be 32° or below, during the growing season. Adjectives, such as "killing", "severe", or "hard", are used when appropriate. A freeze may or may not be accompanied by the formation of frost.

FROST - The formation of thin ice crystals on the ground or other surfaces in the form of scales, needles, feathers, or fans. Frost develops under conditions similar to dew, except the temperatures are near or below freezing.

FUNNEL CLOUD - A rotating column of air forming a pendant from a cumulus or cumulonimbus cloud with circulation not reaching the ground.

FREEZING RAIN (DRIZZLE) - Rain (drizzle) which freezes on contact to produce a coating of ice on the ground and other exposed surfaces.

HAIL - Precipitation of small balls or other pieces of ice (hailstones) falling separately or frozen together in irregular lumps. Hail is typically associated with thunderstorms and surface temperatures above freezing.

HEADWATERS - Tributary streams at the source of a river.

HEAVY SNOW - The following criteria are used by WFO Cheyenne:

a. In the mountains (above 7500 ft), snow fall of:

1. 12 inches or more in 24 hours, or
2. 12 inches or more during an event

b. Elsewhere (below 7500 ft), snow fall of:

1. 6 inches or more in 24 hours, or
2. 6 inches or more during an event

HEAT INDEX - The temperature the body feels when the heat and humidity are combined.

HIGH WINDS - The following criteria is used by WFO Cheyenne:

a. In the mountains (above 7500 ft), wind speeds:

1. sustained winds of 50 mph or greater lasting for 1 hr. or longer, or
2. wind gusts of 75 mph or greater for any duration

b. Elsewhere (below 7500 ft), wind speeds:

1. sustained winds of 40 mph or greater lasting for 1 hr. or longer, or
2. wind gusts of 60 mph or greater for any duration

MACROBURST - A downdraft of air reaching the ground, usually associated with a thunderstorm, with an outflow diameter 2.5 miles or larger and damaging winds lasting 5 to 20 minutes. Intense macrobursts could cause tornado-force damage.

MAJOR FLOODING - A general term indicating extensive inundation and property damage. Usually characterized by the evacuation of people and livestock, and the closure of primary roads.

MICROBURST - A downdraft of air reaching the ground, usually associated with a thunderstorm, with an outflow diameter of less than 2.5 miles and peak winds lasting 2 to 5 minutes. They may induce dangerous wind and downflow wind shears which can affect aircraft performance.

MINOR FLOODING - A general term used to categorized flooding with minimal or no property damage, but the possibility of some public inconvenience exists.

RAIN - Precipitation of liquid water particles which, in contrast to drizzle, are widely separated and larger in size.

RAIN SHOWER - Precipitation that is falling from a cumuliform cloud and changes intensity rapidly.

REACH - A segment of a stream or river channel between two points. This term is used in warning and forecast products to describe a part of a river which is reasonably uniform with respect to discharge, depth, cross-sectional area and slope.

RUNOFF - The part of precipitation that flows toward a river or stream on the surface of the ground, or through the soil before returning to the surface.

SEVERE THUNDERSTORM - A thunderstorm with winds of 58 mph or more and/or hail 3/4 inch diameter or larger. Structural wind damage may imply the occurrence of a severe thunderstorm.

SLEET - Pellets of ice composed of frozen or mostly frozen raindrops (or refrozen melted snow) which usually bounce after hitting the ground or other hard surfaces.

SNOW - Precipitation of ice crystals which are often hexagonal in shape.

SNOW FLURRIES - Short duration of intermittent light snowfall. Accumulations are generally small.

SNOW SHOWERS - Short duration of snowfall that changes intensity rapidly. Some accumulation is expected.

SQUALL LINE - A line or narrow band of thunderstorms which can persist for one hour or more and can extend over several hundred miles.

STAGE - The level of the surface of a river or lake above a predetermined base elevation or "datum". This is not necessarily the depth of the channel.

THUNDERSTORM - A local storm caused by moist buoyant air rising through the atmosphere and accompanied by thunder and lightning. These storms can produce strong gusty winds, hail, heavy rain, funnel clouds and tornados.

TORNADO - A violent rotating column of air, usually forming a pendant from a cumulonimbus cloud, with the circulation reaching the ground. It nearly always starts as a funnel cloud and may be accompanied by a loud roaring noise. On a local scale, it is the most destructive of all atmospheric phenomena.

WATERSPOUT - A violently rotating column of air usually forming a pendant from a cumulus or cumulonimbus cloud, occurring over a body of water, and having circulation reaching the water.

WIND CHILL INDEX - The chilling effect due to the combination of wind and cold temperatures on the human body. See the chart on the next page.

Wind Chill Index Chart

WIND CHILL CHART (Note this is the New Chart as of 7/01)

New Wind Chill Chart

Temperature (°F)

Wind (mph)	Temperature (°F)																		
	Calm	40	35	30	25	20	15	10	5	0	-5	-10	-15	-20	-25	-30	-35	-40	-45
5	36	31	25	19	13	7	1	-5	-11	-16	-22	-28	-34	-40	-46	-52	-57	-63	-69
10	34	27	21	15	9	3	-4	-10	-16	-22	-28	-35	-41	-47	-53	-59	-66	-72	-78
15	32	25	19	13	6	0	-7	-13	-19	-26	-32	-39	-45	-51	-58	-64	-71	-77	-83
20	30	24	17	11	4	-2	-9	-15	-22	-29	-35	-42	-48	-55	-61	-68	-74	-81	-87
25	29	23	16	9	3	-4	-11	-17	-24	-31	-37	-44	-51	-58	-64	-71	-78	-84	-90
30	28	22	15	8	1	-5	-12	-19	-26	-33	-39	-46	-53	-60	-67	-73	-80	-87	-93
35	28	21	14	7	0	-7	-14	-21	-27	-34	-41	-48	-55	-62	-69	-76	-82	-89	-95
40	27	20	13	6	-1	-8	-15	-22	-29	-36	-43	-50	-57	-64	-71	-78	-84	-91	-97
45	26	19	12	5	-2	-9	-16	-23	-30	-37	-44	-51	-58	-65	-72	-79	-86	-93	-99
50	26	19	12	4	-3	-10	-17	-24	-31	-38	-45	-52	-60	-67	-74	-81	-88	-95	-101
55	25	18	11	4	-3	-11	-18	-25	-32	-39	-46	-54	-61	-68	-75	-82	-89	-96	-102
60	25	17	10	3	-4	-11	-19	-26	-33	-40	-48	-55	-62	-69	-76	-84	-91	-98	-104

Frostbite occurs in 15 minutes or less

$$\text{Wind Chill (°F)} = 35.74 + 0.6215T - 35.75(V^{0.16}) + 0.4275T(V^{0.16})$$

Where, T = Air Temperature (°F)
V = Wind Speed (mph)

Wind speeds greater than 40 MPH have little additional cooling effect.

In the late 1940s, Antarctic explorers Siple and Passel experimented with measuring the time it took to freeze 250 grams of water in different temperature and wind

conditions. They developed empirical formulas relating these data to the rate of heat loss from exposed human skin. They developed the following formula which was used to determine the wind chill index. At wind speeds of 4 mph or less, the wind chill temperature is the same as the actual air temperature.

Terms for Precipitation Forecasts

Expressions of INTENSITY - The character or intensity of the precipitation over the forecast area.

Descriptive Terms Intensity Rate

VERY LIGHT, SPRINKLES, less than measurable amounts (.01")

DRIZZLE, FLURRIES

LIGHT less than .10 inch per hour

MODERATE .10 to .30 inch per hour

HEAVY greater than .30 inch per hour

Expressions of DURATION - A description of the length of time precipitation will last before stopping and possibly starting again.

Descriptive Terms Duration

BRIEF Short duration.

OCCASIONAL Occurring at irregular intervals; the periods of precipitation are relatively short and occupy only a

short part of the total time.

INTERMITTENT Occurring at intervals; recurrent; periodic. Intermittent precipitation is not "showery". It is ordinarily of general and prolonged character, but is interrupted by periods without precipitation.

FREQUENT Occurring quite often or at close intervals.

Probability of Precipitation:

A POP is included in each period of the public zone forecast when measurable precipitation is occurring or is immanent. The probability of precipitation is defined as the likelihood of occurrence of a precipitation event (expressed in a percentage) at any given point in the forecast area (usually a public weather zone).

Terms for Temperature Forecasts

TEMPERATURE - Numerical temperature values may be presented in the following ways:

A specific value that has been rounded to the nearest 5 or zero, like "near", "around", or "about":
near 55 around 85 about 10

A specific range of temperatures rounded to the nearest 5 or zero:
50 to 55 20 to 30 above

A specific unqualified temperature: 55

A general temperature range where the terms are defined:

Lower 50s 50,51,52,53

Mid 50s 54,55,56

Upper 50s 57,58,59

50s 50,51,52,53,54,55,56,57,58,59

Terms for Wind Forecasts

WIND - Normally wind direction and speed forecasts are limited to the first two periods of a public zone forecast, unless sustained winds of 15 mph or greater are forecast to occur.

Direction: Will be expressed as the direction from which the wind is blowing with reference to TRUE NORTH and will be given to 8 points of the compass.

Speed: Wind speed is given in miles per hour (mph). It is generally not practical to describe all the variations in wind speed across a forecast zone, so a range of low to high speeds are given. To keep forecasts simple, wind speed ranges are generally rounded to the nearest 5 mph. Gust values are often given when speed exceeds 25 mph.

Descriptive Terms: Various descriptive terms may be used in combination with the numerical values to describe the intensity and character of the wind.

Descriptive Term Sustained Wind Speed

LIGHT or LIGHT AND VARIABLE 0 - 5 mph

(NONE USED) 5 - 15 mph
BREEZY/BRISK/BLUSTERY 15 - 25 mph
WINDY 20 - 30 mph
VERY WINDY 30 - 40 mph
STRONG, DAMAGING, DANGEROUS 40 mph or greater

Terms for Sky Condition Forecasts

Sky Condition - Forecasts may include information about the state of the sky. However, it may be omitted if it would unnecessarily complicate the forecast, like when the forecast says "periods of rain" it implies cloudy skies.

Descriptive Term Cloud Cover Amount
CLOUDY 7/8 to 8/8
MOSTLY CLOUDY 6/8
PARTLY CLOUDY or PARTLY SUNNY 3/8 to 5/8
MOSTLY SUNNY or MOSTLY CLEAR 2/8
CLEAR or SUNNY 0/8 to 1/8

ROUTINE PUBLIC PRODUCTS

Area Forecast Discussion

The Area Forecast Discussion provide an explanation of the reasoning that the meteorologist used to develop the current forecast products. They may use terms that are not generally understood by non-meteorologists. The primary purpose of these products is for internal coordination between NWS offices, but they can also be used by others to help them to understand the reasoning behind the current forecast and the weather that is expected to occur. Area Forecast Discussions are issued twice daily (early morning and afternoon).

Area Forecast Discussion Example:

FXUS65 KCYS 142033
AFDCYS

AREA FORECAST DISCUSSION
NATIONAL WEATHER SERVICE CHEYENNE WY
133 PM MST FRI NOV 14 2003

SHORT TERM...SHORTWAVE IN NW UPPER FLOW DEPARTING CWA NOW BUT NEXT ONE ON ITS HEELS. THESE WILL KEEP WDLY SCATTERED SNOW SHOWERS INTO FRI. PASSAGE OF WEAK WAVES WILL DRAG SOME COOLER AIR OVER THE REGION SO A LITTLE COOLER TEMPERATURES EXPECTED FOR FRI. WILL FAVOR THE COOLER GUIDANCE TEMPS WITH PLENTY OF CLOUD COVER. CONDITIONS SHOULD START TO IMPROVE LATE FRI AS LAST IN SERIES OF SHORTWAVES MOVES ACROSS AND UPPER RIDGE TO WEST BEGINS TO EXERT ITS INFLUENCE.

LONG TERM...STRONG NORTH NORTHWEST FLOW ALOFT FRI NIGHT AND SAT

AHEAD OF UPPER RIDGE. TILTED RIDGE AXIS WILL PASS QUICKLY OVER CYS FORECAST AREA SAT NIGHT WITH FLOW ALOFT BACKING TO ZONAL AND INCREASING SUNDAY AS RAPIDLY MOVING SHORTWAVES FLATTEN THE UPPER RIDGE. UPPER FLOW WILL VEER TO NORTHWEST SUN NIGHT AND REMAIN NORTHWEST MON. FLOW WILL RELAX SOMEWHAT TUE AND BECOME SLIGHTLY ANTICYCLONIC WED WITH BROAD FLAT RIDGE OVER WESTERN CONUS. FLOW WILL BACK SLIGHTLY TO WEST SOUTHWEST THU WITH INCREASING MOISTURE AHEAD OF THE NEXT APPROACHING SHORTWAVE. AT THE SURFACE...LEESIDE TROUGH WILL DEVELOP SAT WHICH WILL INDUCE STRONG DOWNSLOPE FLOW EAST OF THE MOUNTAINS. THIS WILL PRODUCE DRY...WINDY AND MILDER CONDITIONS SAT. SIMILAR WEATHER EXPECTED SUN WITH TEMPERATURES JUST A TAD WARMER. DRY AND BREEZY/WINDY REGIME WILL CONTINUE MON ALTHOUGH A WEAK COLD FRONT WILL PUSH THROUGH THE REGION EARLY MON WITH TEMPS A BIT COOLER THAN THOSE EXPECTED SUN. LIKE A BROKEN RECORD...DRY AND BREEZY/WINDY CONDITIONS WILL MAINTAIN GRIP ON FORECAST AREA TUE THROUGH THU WITH TEMPS SOMEWHAT ABOVE NORMAL DUE TO ADIABATIC WARMING ASSOCIATED WITH THE STRONG DOWNSLOPE FLOW.

.CYS...

WY...NONE.

NE...NONE.

Coded Cities Forecast

The Coded Cities Forecast product is issued around 145 am/pm MST (245 am/pm MDT) each day. The product contains forecast temperatures, probability of precipitation and general weather forecast codes for selected cities.

WFO Cheyenne will issue a CCF for Cheyenne. The format calls for a forecast out to 7 days.

```
CYS BE 044/025 040/023 050 00022
NNBBB 033/055 027/050 032/057 034/057 032 0000000000
```

CYS (Cheyenne Forecast) BE - Forecast for first 12 hours (B- partly cloudy) and second 12 hours (E - mostly cloudy) Today's max - 044F; tonight's min - 025F; tomorrow's max- 040; tomorrow's min - 023; day 2 max - 050
Probability of precipitation for 12 hours periods - 00022, 0% today, tonight and tomorrow; 20% tomorrow night and day 2. NNBBB is weather forecast for day 3 through 7 in 24 hour periods. Days 3 and 4 are windy (N). Days 5, 6, and 7 are Partly Cloudy (B). The max and min temperatures (deg F) follow. 0000000000 the probability of precipitation for 12 hour periods starting on day 3's night through day 7.

Similar forecasts are provided for Laramie and Rawlins, WY, and Scottsbluff, Chadron and Sidney, NE.

FPUS45 KCYS 141020

CCFCYS

```
CYS BE 044/025 040/023 050 00022
```

```

NNBBB 033/055 027/050 032/057 034/057 032 00000000000
LAR EE 037/020 035/018 044 00232
NNABE 024/047 025/044 023/050 024/050 024 00000000000
RWL EE 037/020 035/018 044 00232
NNABE 024/047 025/044 023/050 024/050 024 00000000000
BFF BE 046/025 046/020 055 00012
BBBBB 028/059 026/053 028/061 029/061 033 00000000000
CDR BE 046/025 046/020 055 00012
BBBBB 028/059 026/053 028/061 029/061 033 00000000000
SNY BE 046/025 046/020 055 00012
BBBBB 028/059 026/053 028/061 029/061 033 00000000000=
    
```

Weather Codes

U...SUNNY	R...RAIN	F...FOG	N...WINDY	V...CLEAR	W...RNSHWRS	D...DUST	Q... BLWG SNW
A...FAIR	S...SNOW	H... HAZE	P... BLIZZARD	B...PARTLY CLOUDY	J... SNOWSHWRS	K...SMOKE	G... VRY HOT
E... MOSTLY CLOUDY	O...RAIN/SNOW	I... VRY CLD	L...DRZL	C... CLOUDY	X...SLEET	M... FLURRIES	Z... FRZG DRZL
Y...FRZG RAIN	T...THUNDERSTORMS						

PROBABILITY OF PRECIPITATION FORECASTS :

0...NEAR ZERO	-...5 PCT	1...10 PCT	2...20 PCT	3...30 PCT	4...40 PCT	5...50 PCT	6...60 PCT
7...70 PCT	8...80 PCT	9...90 PCT	+...100 PCT				

Public Zone Forecast

The Public Zone Forecast products contain general information on expected weather within a given area or zone. This includes the expected chance of precipitation, high and low temperatures, wind speed and direction, cloud cover and precipitation type, probability of precipitation as well as other significant weather elements. The public zones are organized by counties, topography, and climate. Zone Forecast products are available twice a day at approximately 3 to 4 am/pm with updates as needed. Forecasts go out to seven (7) days.

Public Zone Forecast Example (note this a new format as of November 2002):

ZCZC CYSZFCYS

FPUS55 KCYS 141128

SOUTHEAST WYOMING AND NEBRASKA PANHANDLE ZONE FORECASTS
NATIONAL WEATHER SERVICE CHEYENNE WY
440 AM MST FRI NOV 14 2003

WYZ061-062-065-142340-
LARAMIE VALLEY-NORTH CARBON-SOUTHWEST CARBON-
INCLUDING THE CITIES OF...LARAMIE...MEDICINE BOW...RAWLINS
440 AM MST FRI NOV 14 2003

.TODAY...MOSTLY CLOUDY AND COOLER. ISOLATED MORNING SNOW SHOWERS...
THEN A 20 PERCENT CHANCE OF SNOW SHOWERS THIS AFTERNOON. HIGHS 35
TO 40. BRISK WEST OR NORTHWEST WINDS 15 TO 25 MPH AT TIMES.
.TONIGHT...MOSTLY CLOUDY WITH A 30 PERCENT CHANCE OF SNOW SHOWERS.
LOWS NEAR 20. WEST WINDS 10 TO 15 MPH.
.SATURDAY...MOSTLY CLOUDY AND WINDY WITH A 20 PERCENT CHANCE OF SNOW
SHOWERS. HIGHS IN THE MID 30S. WEST WINDS 20 TO 30 MPH.
.SATURDAY NIGHT...DECREASING CLOUDS. LOWS 15 TO 20.
.SUNDAY...PARTLY CLOUDY AND WINDY. NOT AS COLD WITH HIGHS IN THE
MID 40S.
.MONDAY...DRY AND WINDY. LOWS IN THE MID 20S. HIGHS IN THE MID TO
UPPER 40S.
.TUESDAY...DRY AND WINDY. LOWS 20 TO 25 AND HIGHS IN THE MID 40S.
.WEDNESDAY AND THURSDAY...DRY AND BREEZY AT TIMES. LOWS IN THE 20S.
MILD WITH HIGHS 45 TO 55.

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Public Forecast Zones in WFO Cheyenne County Warning Area

The following ID numbers are the zone numbers used for each county within the WFO Cheyenne County Warning Area for routine and long-fused products and warnings (see appendix):

WYZ059 - CONVERSE	WYZ060- NIOBRARA	WYZ061 - SOUTHWEST CARBON
WYZ062 - NORTH CARBON	WYZ063 - SNOWY RANGE	WYZ064 - NORTH LARAMIE RANGE
WYZ065 - LARAMIE VALLEY	WYZ066 - LARAMIE RANGE	WYZ067 - PLATTE
WYZ068 - GOSHEN	WYZ069 - CHEYENNE FOOTHILLS	WYZ070 - PINE BLUFFS

WY = Wyoming

The following FIPs (Federal Information Processing System) codes are used for each county within the WFO Cheyenne CWA for short-fused (i.e., Severe Thunderstorm, Tornado, Flash Flood, Blizzard) warnings:

WYOMING - COUNTIES	NEBRASKA - COUNTIES
056009 - CONVERSE	031007 - BANNER
056027 - LUSK	031013 - BOX
056031 - PLATTE	BUTTE
056015 - GOSHEN	031033 - CHEYENNE
056007 - CARBON	031045 - DAWES
056001 - ALBANY	031105 - KIMBALL
056021 - LARAMIE	031123 - MORRILL
	031157 - SCOTTSBLUFF
	031165 - SIOUX

Wyoming FIP's code = 056

Nebraska FIP's code = 031

STATE FORECAST TABULAR (SFT)

The SFT is issued twice daily, by 6:00am and 6:00pm. This product is a table that contains 7 days of sky condition, high/low temperature, and probability of precipitation. The following is an example of the SFT:

TABULAR STATE FORECAST FOR WYOMING
 NATIONAL WEATHER SERVICE CHEYENNE WY
 306 AM MST TUE NOV 4 2003

ROWS INCLUDE...

DAILY PREDOMINANT DAYTIME WEATHER
 FORECAST TEMPERATURES...DAYTIME HIGH...NIGHTTIME LOW
 - INDICATES TEMPERATURES BELOW ZERO
 DAYTIME PROBABILITY OF PRECIPITATION
 -- INDICATES MISSING VALUES

| FCST |
|-------|-------|-------|-------|-------|-------|-------|
| TUES | WED | THU | FRI | SAT | SUN | MON |
| NOV04 | NOV05 | NOV06 | NOV07 | NOV08 | NOV09 | NOV10 |

CITY

BIG PINEY, WY

VRYCLD	VRYCLD	PTCLDY	MOCLDY	SNOW	SNOW	SNOW
25/00	19/02	21/04	31/10	33/14	35/10	33
POP 30	POP 0	POP 0	POP 0	POP 50	POP 50	POP 50

BUFFALO, WY

SNOW	VRYCLD	PTCLDY	MOCLDY	SNOW	SNOW	SNOW
23/05	23/04	28/16	35/19	37/23	35/23	33

POP 70	POP 0	POP 0	POP 0	POP 50	POP 50	POP 50
--------	-------	-------	-------	--------	--------	--------

CASPER, WY

MOCLDY	VRYCLD	PTCLDY	PTCLDY	MOCLDY	MOCLDY	MOCLDY
28/07	24/05	31/14	39/21	38/25	36/24	34
POP 30	POP 20	POP 0				

CHEYENNE, WY

PTCLDY	MOCLDY	PTCLDY	PTCLDY	PTCLDY	PTCLDY	PTCLDY
42/18	32/16	38/19	46/24	50/25	44/24	46
POP 10	POP 40	POP 0	POP 10	POP 10	POP 20	POP 0

CODY, WY

CLOUDY	VRYCLD	PTCLDY	PTCLDY	MOCLDY	MOCLDY	CLOUDY
22/05	24/04	29/17	35/18	38/21	36/25	34
POP 50	POP 0	POP 40				

DOUGLAS, WY

PTCLDY	MOCLDY	FAIR	FAIR	PTCLDY	MOCLDY	PTCLDY
36/10	28/09	32/14	41/22	47/23	42/19	47
POP 20	POP 20	POP 0	POP 10	POP 20	POP 30	POP 0

GILETTE, WY

MOCLDY	MOCLDY	PTCLDY	PTCLDY	MOCLDY	PTCLDY	PTCLDY
23/03	23/08	27/12	34/18	35/21	42/25	45
POP 40	POP 30	POP 0	POP 0	POP 30	POP 0	POP 0

JACKSON, WY

SNOW	VRYCLD	PTCLDY	PTCLDY	SNOW	SNOW	SNOW
22/03	23/02	27/12	34/18	35/21	42/25	45
POP 80	POP 0	POP 0	POP 0	POP 50	POP 50	POP 50

LARAMIE, WY

PTCLDY	PTCLDY	PTCLDY	PTCLDY	MOCLDY	PTCLDY	PTCLDY
35/12	30/08	35/13	41/19	45/20	41/17	42
POP 30	POP 40	POP 0	POP 20	POP 30	POP 40	POP 0

INTERACTIVE FORECAST PREPARATION SYSTEM (IFPS) and the NATIONAL DIGITAL FORECAST DATABASE (NDFD):

Effective in early 2002, the Cheyenne WFO began issuing forecasts and related products to the NDFD using the IFPS. This is the beginning of a national effort of creating a digital forecast data base for the United States. Essentially, forecasters will be developing fields of specific weather parameters (i.e., max temperature, min temperature, weather, sky condition, etc.) out to 10 days for gridpoints spaced approximately every 4 KM.

The NDFD will be a "living data base", as it will be current all the time. Forecasters in offices like Cheyenne will be responsible for the NDFD across their assigned area (county warning area). Not only will alphanumeric products, like the zone forecast be generated from the NDFD, but graphical forecasts will also be available. Below is a typical NDFD field for maximum temperature for Thursday, November 14.

NDFD fields will be available off the NWS office websites. <http://www.crh.noaa.gov/ifps/>

Extended Outlook

Issued: Daily FEUS75 KCYS

ZCZC CYSEOLWY
FEUS75 KCYS 142055

NEZ001>003-019>021-054-055-WYZ059>070-152100-

SOUTHEAST WYOMING/WESTERN NEBRASKA 8 TO 14 DAY OUTLOOK
NATIONAL WEATHER SERVICE CHEYENNE WY
300 PM MDT FRI NOV 14 2003

THE OUTLOOK FOR SATURDAY NOVEMBER 22 THROUGH FRIDAY NOVEMBER 28 IS
FOR BELOW NORMAL TEMPERATURES AND NORMAL PRECIPITATION.

FAST WESTERLY FLOW WILL CONTINUE TO BRING A SERIES OF LOW PRESSURE
SYSTEMS ACROSS SOUTHEAST WYOMING AND THE WESTERN NEBRASKA PANHANDLE
THROUGH THE PERIOD. THE FIRST SYSTEM WILL AFFECT THE REGION
MONDAY...WITH THE SYSTEMS FORECAST TO MOVE THROUGH THE AREA EVERY
COUPLE OF DAYS. EACH SYSTEM WILL BRING COOLER TEMPERATURES AND A
CHANCE OF LIGHT PRECIPITATION.

HIGHS FOR THE PERIOD WILL AVERAGE AT OR SLIGHTLY BELOW SEASONAL
NORMALS. HIGHS WILL BE IN THE 40S AND 50S. LOWS WILL BE IN THE 20S
AND 30S. PRECIPITATION WILL BE AROUND A TENTH OF AN INCH.

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Climate Summary and Climatological Report

Daily: CDUS45 KCYS (Cheyenne and Scottsbluff)

Monthly: CSUS55 KCYS (Cheyenne) CSUS53 (Scottsbluff)

Climate Summary products are issued for Cheyenne and Scottsbluff each day, shortly after midnight. Most of the data

in these products is gathered by an automated weather observation platform called Automated Surface Observing Systems (ASOS).

The Climate Summary product contains information on the previous day's temperatures, precipitation and wind. The product also contains normal and record temperatures and other data such as sun/moon rise and set times for the current day.

ASOS does not measure snowfall or snow depth. For the Cheyenne Climate Summary, the snowfall and snow depth is measured by National Weather Service employees. For the Scottsbluff Climate Summary, the snow data is gathered by a Cooperative Observer, and is not available in real-time.

The monthly Climate Report is produced for Cheyenne and Scottsbluff around the first day of each month. This product provides information on the average high and low temperatures, degree days, weather, snowfall, precipitation, pressure, and wind for the previous month.

CDUS45 KCYS 010917

CYSCLIXXX000TTAA00 KCYS 010913

CLIMATE REPORT

NATIONAL WEATHER SERVICE CHEYENNE WY

217 AM MST SAT FEB 1 2003

.....

...THE CHEYENNE CLIMATE SUMMARY FOR 31 JANUARY 2001...

CLIMATE NORMAL PERIOD 1961 TO 1990

CLIMATE RECORD PERIOD 1871 TO 2001

WEATHER ITEM	OBSERVED VALUE	RECORD VALUE	YEAR	NORMAL VALUE	DEPARTURE FROM NORMAL	LAST YEAR
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.....

TEMPERATURE

YESTERDAY

MAXIMUM	31	63	1954	39	-8	42
MINIMUM	12	-27	1951	16	-4	8
AVERAGE	22			28	-6	

PRECIPITATION

(INCHES)

YESTERDAY	0.00	0.63	1883	0.01	-0.01	0.00
MONTH TO DATE	0.41	MM	MM	0.40	0.01	0.35
SINCE 1 JAN	0.41	MM	MM	0.40	0.01	0.35

SNOWFALL

(INCHES)

YESTERDAY	0.00	6.30	1943	0.00
MONTH TO DATE	8.60	MM	MM	2.90
SINCE 1 SEP	38.90	MM	MM	13.50

DEGREE DAYS

HEATING

YESTERDAY	43	37	6
MONTH TO DATE	1155	1194	-39
SINCE 1 JUL	4370	4125	245

COOLING

YESTERDAY	0	0	0
MONTH TO DATE	0	0	0
SINCE 1 JAN	0	0	0

.....

WIND (MPH)

HIGHEST WIND SPEED	35	HIGHEST WIND DIRECTION	280
HIGHEST GUST SPEED	40	HIGHEST GUST DIRECTION	290
AVERAGE WIND SPEED	16.7		

SKY COVER

POSSIBLE SUNSHINE 96 PERCENT AVERAGE SKY COVER 0.04

WEATHER CONDITIONS

THE FOLLOWING WEATHER WAS RECORDED YESTERDAY.
 NO SIGNIFICANT WEATHER WAS OBSERVED.

RELATIVE HUMIDITY

HIGHEST RH 67 PERCENT
 LOWEST RH 39 PERCENT
 AVERAGE RH 53 PERCENT

.....

THE CHEYENNE CLIMATE NORMALS FOR TODAY

	NORMAL	RECORD	YEAR
MAXIMUM TEMPERATURE	39	62	1935
MINIMUM TEMPERATURE	16	-25	1985

SUNRISE AND SUNSET

1	FEBRUARY 2001.....	SUNRISE	711 AM	SUNSET	516 PM
2	FEBRUARY 2001.....	SUNRISE	710 AM	SUNSET	517 PM

- INDICATES NEGATIVE NUMBERS.
- R INDICATES RECORD WAS SET OR TIED.
- MM INDICATES DATA IS MISSING.
- T INDICATES TRACE OF PRECIPITATION.

CXUS55 KCYS 011538

CHEYENNE MONTHLY CLIMATE REPORT
 NATIONAL WEATHER SERVICE CHEYENNE WY
 837 AM MST SAT FEB 1 2003

...JANUARY 2001 WAS SLIGHTLY WARMER THAN NORMAL WITH ABOVE AVERAGE
 PRECIPITATION...

TEMPERATURE (IN DEGREES FAHRENHEIT).....
 AVERAGE MAX....37.3 NORMAL...37.7 DEPARTURE..... -.4
 AVERAGE MIN....17.8 NORMAL...15.2 DEPARTURE.....+2.6
 MONTHLY MEAN...27.6 NORMAL...26.5 DEPARTURE.....+1.1

HIGHEST TEMPERATURE..... 56 DEGREES ON THE 5TH
 LOWEST TEMPERATURE..... -5 DEGREES ON THE 17TH
 COLDEST HIGH TEMPERATURE..... 18 DEGREES ON THE 16TH
 WARMEST LOW TEMPERATURE..... 36 DEGREES ON THE 4TH

TEMPERATURE RECORDS BROKEN OR TIED (IN DEGREES FAHRENHEIT).....

TYPE OF RECORD	DATE SET	NEW RECORD	OLD RECORD	YEAR
NONE				

HEATING DEGREE DAYS.....
 MONTHLY TOTAL...1155 NORMAL... 1194 DEPARTURE.....-39
 SEASONAL TOTAL...4370 NORMAL... 4125 DEPARTURE.....+245

COOLING DEGREE DAYS.....
 MONTHLY TOTAL.... 0 NORMAL... 0 DEPARTURE..... 0
 SEASONAL TOTAL... 0 NORMAL... 0 DEPARTURE..... 0

PRECIPITATION (IN INCHES).....
 MONTHLY TOTAL...0.41 NORMAL... 0.40 DEPARTURE.... +.01
 YEARLY TOTAL...0.41 NORMAL... 0.40 DEPARTURE.... +.01

DAYS OF MEASURABLE PRECIPITATION.....5
 MOST PRECIPITATION RECORDED IN 24 HOURS...0.17 ON THE 16TH

SNOWFALL (IN INCHES).....
 MONTHLY TOTAL.... 8.6 NORMAL... 6.0 DEPARTURE.....+2.6
 SEASONAL TOTAL... 38.9 NORMAL... 23.8 DEPARTURE.....+15.1

MOST SNOWFALL RECORDED IN 24 HOURS...4.7 INCHES ON THE 16TH

PRECIPITATION RECORDS.....

TYPE OF RECORD	DATE SET	NEW RECORD	OLD RECORD	YEAR
SNOW FALL	16TH	4.7	4.2	1956

WIND (IN MILES AN HOUR).....

AVERAGE SPEED..... 12.7 NORMAL...15.3 DEPARTURE..... -2.6

PEAK WIND GUST....51 MPH FROM THE WEST ON THE 4TH

SEA LEVEL PRESSURE (IN INCHES OF MERCURY).....

HIGHEST..... 30.62 ON THE 2ND

LOWEST..... 29.50 ON THE 13TH

MISCELLANEOUS WEATHER.....

NUMBER OF DAYS WITH THUNDERSTORMS..... 0

NUMBER OF DAYS WITH FOG..... 6

NUMBER OF DAYS WITH HAIL..... 0

NUMBER OF DAYS WITH GLAZE OR RIME ICING... 0

LOOKING AHEAD TO FEBRUARY 2001.....

THE AVERAGE HIGH..... 40.5 DEGREES

THE AVERAGE LOW..... 18.1 DEGREES

THE AVERAGE MONTHLY TEMPERATURE... 29.3 DEGREES

THE AVERAGE PRECIPITATION..... 0.39 INCHES

THE AVERAGE SNOWFALL..... 5.5 INCHES

THE AVERAGE WIND SPEED..... 14.6 MPH

FROM THE OFFICE AND STAFF AT THE NATIONAL WEATHER SERVICE OFFICE IN CHEYENNE WYOMING.

Record Event Report

Record high or low temperatures Cheyenne, Rawlins, Torrington, Douglas, Alliance, Chadron, Scottsbluff, Wheatland 4N, and Laramie are reported in these messages. In addition, record snowfall is provided for Cheyenne. Record liquid precipitation events are provided for Cheyenne, Laramie, Scottsbluff, Rawlins, Douglas, Chadron and Sidney.

Record Event Report Example:

SXUS99 KCYS 170719
 RECORD EVENT REPORT

NATIONAL WEATHER SERVICE CHEYENNE WY
1220 AM MST FRI JAN 17 2003

...DAILY SNOWFALL RECORD SET IN CHEYENNE...

A RECORD SNOW EVENT OCCURRED IN CHEYENNE ON TUESDAY...WHEN A TOTAL OF 4.7 INCHES OF SNOWFALL WAS RECORDED DURING THE CALENDAR DAY. THIS BROKE THE PREVIOUS RECORD OF 4.2 INCHES WHICH WAS SET BACK IN 1956.

NNNN

State Weather Roundup

This product provides a plain language listing of current weather conditions at various places within Wyoming.

State Weather Roundup Example:

WYOMING STATE WEATHER ROUNDUP
NATIONAL WEATHER SERVICE CHEYENNE WY
200 PM MST FRI JAN 10 2003

NOTE: "FAIR" INDICATES FEW OR NO CLOUDS BELOW 12,000 FEET
WITH NO SIGNIFICANT WEATHER AND/OR OBSTRUCTIONS TO VISIBILITY.

WYZ001-102200

YELLOWSTONE NATIONAL PARK

CITY	SKY/WX	TMP	DP	RH	WIND	PRES	REMARKS
LK YELLOWSTONE	N/A	25	21	85	CALM	29.87F	
MAMMOTH	N/A	31	N/A	N/A	SE3G7	N/A	
TOWER FALLS	N/A	28	N/A	N/A	NW5G6	N/A	WCI 28

\$\$

WYZ002>010-050>058-102200

NORTHERN WYOMING

CITY	SKY/WX	TMP	DP	RH	WIND	PRES	REMARKS
JACKSON	CLOUDY	28	25	86	SW8	29.87S	VSB < WCI 18
CODY	MOSUNNY	45	14	29	W10G22	29.77S	
GREYBULL	CLOUDY	30	17	58	CALM	29.82S	
WORLAND	CLOUDY	32	20	61	NE6	29.81S	WCI 27
SHERIDAN	PTSUNNY	40	25	55	W8	29.79F	WCI 31
BUFFALO	CLOUDY	40	20	44	NW10	29.78S	WCI 28
GILLETTE	PTSUNNY	39	21	48	NW12	29.77S	WCI 25

\$\$

WYZ011>017-019-020-059-060-102200

CENTRAL WYOMING

CITY	SKY/WX	TMP	DP	RH	WIND	PRES	REMARKS
BIG PINEY	PTSUNNY	25	18	74	E3	29.90F	
LANDER	PTSUNNY	30	19	63	SE5	29.81F	WCI 30
Cheyenne	MOSUNNY	23	13	65	SE5	29.81F	WCI 23
CASPER	PTSUNNY	38	27	64	SW20	29.82S	WCI 16
DOUGLAS	PTSUNNY	38	28	67	W12	29.77S	WCI 24

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WYZ018-021>025-061>070-102200

SOUTHERN WYOMING

CITY	SKY/WX	TMP	DP	RH	WIND	PRES	REMARKS
EVANSTON	PTSUNNY	32	21	64	W15	29.91S	WCI 12
ROCK SPRINGS	PTSUNNY	32	21	64	W9	29.91S	WCI 20
RAWLINS	CLOUDY	32	26	78	W21G25	29.88F	WCI 6
CHEYENNE	PTSUNNY	46	21	37	W21G28	29.81F	

NNNN

State Temperature and Precipitation Table

The State Temperature and Precipitation Table gives a summary of daily maximum and minimum temperatures, precipitation and snowfall for the past 12 hours across Wyoming. The table is produced around 5:30 am/pm MST (6:30 am/pm MDT) and 730 am MST (830 am MDT) by the NWS office in Cheyenne.

State Temperature and Precipitation Table Example:

ZCZC CYSSTPWY

ASUS55 KCYS 291430

STATE TEMPERATURE AND PRECIPITATION TABLE

NATIONAL WEATHER SERVICE RIVERTON WY

729 AM MST WED JAN 29 2003

.BR RIW 0129 M DH00/TX/DH06/TAIRZP/PP/SF/SD

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:VALUES REPRESENT YESTERDAYS HIGHS...LOWS OVER THE LAST 12 HOURS

:AND PRECIPITATION OVER THE LAST 24 HRS ENDING AT 0500 AM

:

				SNOW	SNOW
		HIGH	LOW	PCPN	FALL DEPTH
BPI	: BIG PINEY	: 30	/ -2	/ 0.00	/ /
BYG	: BUFFALO	: 40	/ 15	/ 0.00	/ /
CPR	: CASPER	: 27	/ 14	/ 0.07	/ /
CYS	: CHEYENNE	: 24	/ 21	/ 0.17	/ / 3

COD	: CODY	:	32	/	9	/	0.00	/	/
DGW	: DOUGLAS	:	28	/	15	/	0.17	/	/
EVW	: EVANSTON	:	27	/	7	/	0.02	/	/
GCC	: GILLETTE	:	35	/	15	/	0.00	/	/
GEY	: GREYBULL	:	17	/	-12	/	0.00	/	/
JAC	: JACKSON	:	18	/	-15	/	0.00	/	/
P60	: LAKE YELLOWSTONE	:	14	/	-20	/	0.00	/	/
LND	: LANDER	:	23	/	0	/	0.00	/	9
LAR	: LARAMIE	:	23	/	17	/	0.07	/	M
RWL	: RAWLINS	:	24	/	17	/	T	/	M
RIW	: RIVERTON	:	23	/	-3	/	0.00	/	4
RKS	: ROCK SPRINGS	:	25	/	10	/	0.01	/	M
SHR	: SHERIDAN	:	29	/	3	/	0.00	/	1
TOR	: TORRINGTON	:	32	/	24	/	0.06	/	/
WRL	: WORLAND	:	27	/	-7	/	0.00	/	M

:THE HIGHEST TEMPERATURE ACROSS THE STATE YESTERDAY WAS...48
:AT WAPITI.

:THE LOWEST TEMPERATURE ACROSS THE STATE TODAY WAS... -20
:AT LAKE YELLOWSTONE.

.END

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State Weather Summary

The State Weather Summary provides a narrative description of the weather which occurred across Wyoming during the past 12 hours. It is issued twice per day. The summary may also include a brief synopsis of expected weather.

State Weather Summary Example:

AWUS45 KRIW 111225
SWSWY

STATE WEATHER SUMMARY
NATIONAL WEATHER SERVICE RIVERTON WY
525 AM MST SAT JAN 11 2003

...AN APPROACHING PACIFIC STORM SYSTEM WILL BRING INCREASING CLOUDS TO WYOMING TODAY...

FOR SOUTHEAST WYOMING...
A MOSTLY CLEAR SKY PREVAILED OVERNIGHT. TEMPERATURES WERE MORE UNIFORM THAN THE PAST FEW EARLY MORNINGS WITH 400 AM READINGS IN THE UPPER TEENS AND 20S. A WEST TO NORTHWEST WIND OF 10 TO 20 MPH PREVAILED IN MOST AREAS. STRONGER WINDS OF 25 TO 40 MPH WERE NOTED IN THE SNOWY AND LARAMIE MOUNTAIN RANGES AND NEAR WHEATLAND.

FOR NORTHEAST WYOMING...

LIGHT SNOW SHOWERS DEVELOPED AND MOVED OVER PORTIONS OF NORTHEASTERN WYOMING PRIOR TO MIDNIGHT. MOST PLACES SAW LITTLE MORE THAN A DUSTING... HOWEVER AREAS AROUND GILLETTE SAW 1-2 INCHES AND A VERY LOCALIZED 4 INCH REPORT CAME IN 7 MILES SOUTH OF GILLETTE. IN THE HOURS JUST BEFORE SUNRISE...FOG AND VERY LOW CLOUDS DEVELOPED AND SPREAD OVER THE AREA...HELPING TO MAINTAIN TEMPERATURES IN THE LOWER 30S.

FOR WESTERN AND CENTRAL WYOMING...SKIES WERE MOSTLY CLEAR FOR MUCH OF THE NIGHT. CLOUDS BEGAN TO INCREASE OVER THE WEST AROUND 3 AM. PATCHY DENSE FOG SPREAD ACROSS THE UPPER GREEN RIVER BASIN AROUND MIDNIGHT. SOUTHWEST WINDS FROM 15 TO 30 MPH BLEW FROM EASTERN FREMONT COUNTY INTO NATRONA COUNTY. EARLY MORNING TEMPERATURES WERE IN THE TEENS AND 20S...EXCEPT FOR SINGLE DIGITS ...BOTH ABOVE AND BELOW ZERO...IN THE FAR WEST VALLEYS.

FOR TODAY...

PARTLY CLOUDY. SCATTERED AFTERNOON SNOW SHOWERS WEST. AREAS OF BRISK WINDS. HIGHS IN THE 30S AND 40S...SOME 20S WESTERN BASINS AND VALLEYS.

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Public Information Statement

This is an all purpose message that may contain information on changes occurring at NWS offices, weather radio outages, upper air outages or for large events where a significant number of people will be outside. The PNS can also include information on severe weather and boating safety, severe weather drills, etc.

Public Information Statement Example:

ZCZC CYPNSCY5
NOUS45 KCYS 292241

HIGH WIND WATCH SAFETY RULES
NATIONAL WEATHER SERVICE CHEYENNE WY
341 PM MST WED JAN 29 2003

THE NATIONAL WEATHER SERVICE IN CHEYENNE HAS ISSUED A HIGH WIND WATCH FOR A PART OF WYOMING. A HIGH WIND WATCH MEANS THAT SUSTAINED WINDS OF 40 MPH OR MORE OR WIND GUSTS OF 60 MPH OR MORE ARE POSSIBLE IN LOWER ELEVATIONS. IN THE HIGHER ELEVATIONS A WATCH MEANS THAT SUSTAINED WINDS OF 50 MPH OR MORE OR WIND GUSTS OF 70 MPH OR MORE ARE POSSIBLE.

WHEN IN AN AREA UNDER A HIGH WIND WATCH...YOU SHOULD SECURE ALL LOOSE MATERIALS AND MOVE IMPORTANT OUTDOOR ITEMS INDOORS. ANY LOOSE MATERIAL CAN BECOME DANGEROUS WHEN DRIVEN BY THE STRONG WINDS.

TRAVEL CAN BE DIFFICULT AND EVEN HAZARDOUS IN A HIGH WIND SITUATION...ESPECIALLY FOR HIGH PROFILE OR LIGHTWEIGHT VEHICLES. IF PLANNING TRAVEL IN A HIGH WIND WATCH AREA IT MAY BE A GOOD IDEA TO POSTPONE TRAVEL OR SELECT AN ALTERNATE ROUTE.

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WSR-88D Free Text Message

Event driven messages concerning the status of the WFO Cheyenne Doppler Radar are sent in this product. When the radar is down for maintenance or failure, a message will be sent that includes the reason and expected down time. Follow up messages will be sent as needed and when the radar is once again operational.

EXAMPLES OF WEATHER PRODUCTS

Hazardous Weather Outlook(HWO)

When hazardous weather is a concern, Hazardous Weather Outlook is issued for the Cheyenne County Warning area. From April 15 through September 30, the HWO will be issued daily for mainly convective weather events. It will be issued no later than 6AM (optional given the events of the day) and again no later than 11AM (mandatory) It is usually issued no later than 11AM and provides information for potential severe convective weather throughout the day.

During the rest of the year the HWO will be issued daily using the following format.

Example of the HWO for non-convective events year around

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ZCZC CYSHWOCYS
FLUS45 KCYS 141225
NEZ001>003-019>021-054-055-WYZ059>070-151315-
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HAZARDOUS WEATHER OUTLOOK
NATIONAL WEATHER SERVICE CHEYENNE WY
530 AM MST FRI NOV 14 2003
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THIS HAZARDOUS WEATHER OUTLOOK IS FOR SOUTHEASTERN WYOMING AND THE
WESTERN NEBRASKA PANHANDLE.
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.DAY ONE...
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SOME SNOW SHOWERS WILL OCCUR TODAY AND TONIGHT...MAINLY IN AND NEAR
THE SOUTHEAST MOUNTAINS WHERE AN INCH OR SO OF SNOW COULD ACCUMULATE.
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.SPOTTER CALL TO ACTION STATEMENT...

SPOTTER ACTIVATION WILL NOT BE NECESSARY.

.DAYS TWO THROUGH SEVEN...

A COLD NORTHWEST FLOW ALOFT WILL LINGER INTO SATURDAY WITH A CHANCE OF SNOW SHOWERS...ESPECIALLY IN THE MOUNTAINS. DRY AND WARMER WEATHER RETURNS FOR THE WEEKEND INTO THE MIDDLE OF NEXT WEEK. IT WILL BE WINDY AT TIMES...ESPECIALLY ON SATURDAY AND SUNDAY.

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Special Weather Statement

These statements are provided as an enhancement to impending or ongoing weather. They are issued on an as need basis.

WWUS35 KCYS 271902

NEZ019>021-054-055-WYZ063-065>070-272300-

SPECIAL WEATHER STATEMENT

NATIONAL WEATHER SERVICE CHEYENNE WY

1203 PM MST MON JAN 27 2003

...SNOW WILL FALL OVER SOUTHEAST WYOMING AND THE SOUTHERN NEBRASKA PANHANDLE LATER TONIGHT THROUGH TUESDAY...

A LOW PRESSURE SYSTEM WAS OVER SOUTHERN CALIFORNIA LATE THIS MORNING. SATELLITE PHOTOS SHOWED DEEP MOISTURE MOVING UP FROM THE SOUTHWEST UNITED STATES AHEAD OF THIS LOW. SNOW WAS FALLING OVER PARTS OF ARIZONA...SOUTHERN UTAH AND ACROSS MOST OF NEW MEXICO THIS MORNING. THE SNOW HAD ALSO SPREAD OVER MUCH OF THE SOUTHERN HALF OF COLORADO.

AS THE BIG LOW MOVES EAST...SNOW WILL SPREAD NORTH INTO SOUTHEAST WYOMING AND THE SOUTHERN NEBRASKA PANHANDLE LATER TONIGHT. THE SNOW WILL CONTINUE IN THESE AREAS THROUGH TUESDAY WITH TOTAL ACCUMULATIONS OF 2 TO 5 INCHES IN MOST PLACES.

PEOPLE PLANNING TRAVEL OR OTHER OUTDOOR ACTIVITIES IN SOUTHEAST WYOMING AND THE SOUTHERN NEBRASKA PANHANDLE LATER TONIGHT AND SUNDAY CAN EXPECT WINTERLIKE CONDITIONS. DRIVING MAY BECOME DIFFICULT AS ROADS BECOME SNOW PACKED ON TUESDAY. RANCHERS MAY WISH TO TAKE STEPS

NOW TO PROTECT ANY YOUNG OR WEAK ANIMALS FROM THE SNOW AND COLD.

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Severe Weather Watches (MKCSELX where X is number 0 thru 9)

When needed, Tornado and Severe Thunderstorm Watch products are issued by the Storm Prediction Center in Norman, OK. Each watch is assigned a number, with the numbering system restarting at one at the beginning of each new year.

When a watch is issued, the risk of severe weather has increased significantly, but the specifics on occurrence, location and timing of individual severe storms is still uncertain. The watch is intended to provide enough lead time so that those who need to set plans in motion can do so.

Severe Weather Watch Example:

ZCZC CYSEL3
TTAA00 KCYS
MKC WW 081959
WYZ000-MTZ000-SDZ000-090300-

URGENT - IMMEDIATE BROADCAST REQUESTED
TORNADO WATCH NUMBER 423
STORM PREDICTION CENTER NORMAN OK
159 PM MDT SUN JUN 8 2003

THE STORM PREDICTION CENTER HAS ISSUED A TORNADO WATCH FOR PORTIONS OF

CENTRAL AND EASTERN WYOMING
SOUTHEAST MONTANA
WESTERN SOUTH DAKOTA

EFFECTIVE THIS SUNDAY AFTERNOON AND EVENING FROM 230 PM UNTIL 900 PM MDT.

TORNADOES...HAIL TO 2 INCHES IN DIAMETER...THUNDERSTORM WIND GUSTS TO 80 MPH...AND DANGEROUS LIGHTNING ARE POSSIBLE IN THESE AREAS.

THE TORNADO WATCH AREA IS ALONG AND 85 STATUTE MILES EAST AND WEST OF A LINE FROM 45 MILES SOUTHWEST OF MILES CITY MONTANA TO 20 MILES NORTH NORTHEAST OF CASPER WYOMING.

REMEMBER...A TORNADO WATCH MEANS CONDITIONS ARE FAVORABLE FOR TORNADOES AND SEVERE THUNDERSTORMS IN AND CLOSE TO THE WATCH AREA. PERSONS IN THESE AREAS SHOULD BE ON THE LOOKOUT FOR THREATENING WEATHER CONDITIONS AND LISTEN FOR LATER STATEMENTS AND POSSIBLE WARNINGS.

OTHER WATCH INFORMATION... CONTINUE...WW 421...WW 422...

DISCUSSION...THREAT FOR SEVERE THUNDERSTORMS WILL INCREASE THIS AFTERNOON/EVENING AS CONVECTION INCREASES ALONG COLD FRONT. SUFFICIENT VERTICAL SHEAR IS IN PLACE FOR SUPERCELLS.

Redefining Statement

Upon watch issuance by the SPC, the NWS Forecast Office in Cheyenne will issue a redefining statement (SLS) that specifies what type of watch has been issued for which specific counties in Wyoming.

Redefining Statement Example:

CYSSLSWY

WWUS32 KCYS 072145

AREAL OUTLINE OF SEVERE THUNDERSTORM WATCH NUMBER 221

NATIONAL WEATHER SERVICE CHEYENNE WY

245 PM MDT MON JUL 7 2003

IN WYOMING

THIS WATCH INCLUDES 2 COUNTIES

WYZ015-028-070330-

IN NORTHEAST WYOMING

NATRONA JOHNSON

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Convective Severe Storm Warnings

A Tornado Warning or Severe Thunderstorm Warning is issued when severe weather is imminent or is occurring. Generally a severe weather warning is based on radar, a reliable spotter report, or satellite data.

Severe Thunderstorm and Tornado warnings are issued for counties or parts of counties. The warning text will include a plain language description of the timing and location expected conditions, basis for the warning (spotter report, radar), and a short call to action statement, if appropriate.

A severe thunderstorm is defined as a storm that produces 58 mph winds or greater and/or hail 3/4 inch or larger in diameter. A storm that produces structural damage to substantial buildings is also defined as severe.

On occasion a quick warning format may be used to issue the message in the shortest possible time. This format will include the warning location, type of warning and timing only, and will be followed later with another warning product with the full details. This type of warning product is used in a situation where the message needs to be disseminated quickly because there is an imminent threat to life and/or property.

In the spring or fall, small cold air funnel clouds are observed along or just behind strong cold fronts. When reports of these funnels clouds are received, the NWS in Cheyenne will issue a Severe Weather Statement (if the threat has ended) or a Tornado Warning (if the threat is expected to continue and if the funnel may touch the ground forming a tornado).

Slow moving severe thunderstorms may also be accompanied by flash flooding. In this case a combination Severe Thunderstorm and Flash Flood Warning may be issued. The heading used will be determined by the greatest threat. It can be either a Flash Flood Warning if flooding is the greatest threat, or a Severe Thunderstorm Warning if a severe thunderstorm with wind and/or hail is the greatest threat.

Severe Thunderstorm Warning Example:

WUUS55 KCYS 250103
WYC001-250145-

BULLETIN - EAS ACTIVATION REQUESTED
SEVERE THUNDERSTORM WARNING
NATIONAL WEATHER SERVICE CHEYENNE WY
702 PM MDT FRI OCT 24 2003

THE NATIONAL WEATHER SERVICE HAS ISSUED A

* SEVERE THUNDERSTORM WARNING FOR...
SOUTHEASTERN ALBANY COUNTY IN SOUTHEAST WYOMING
THIS DOES NOT INCLUDE THE CITY OF LARAMIE

* UNTIL 730 PM MDT

* AT 657 PM MDT...WEATHER SPOTTERS REPORTED A SEVERE THUNDERSTORM NEAR
AMES MONUMENT...OR ABOUT 15 MILES SOUTHEAST OF LARAMIE. SPOTTERS
INDICATED ONE INCH DIAMETER HAIL. THE SEVERE STORM WAS MOVING TO
THE NORTH AT 20 MPH.

* OTHER LOCATIONS IN THE WARNING INCLUDE BUFORD.

IF SEVERE WEATHER APPROACHES YOUR AREA...GO INSIDE A STURDY
SHELTER. LARGE HAIL AND HEAVY RAIN WILL BE ASSOCIATED WITH THIS
STORM.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY
WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE.

LAT...LON 4117 10562 4108 10531 4150 10531 4150 10561

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Tornado Warning Example:

WFUS55 KCYS 052343 COR
NEC007-123-157-060015-

BULLETIN - EAS ACTIVATION REQUESTED
TORNADO WARNING...CORRECTED
NATIONAL WEATHER SERVICE CHEYENNE WY
540 PM MDT SAT JUL 5 2003

THE NATIONAL WEATHER SERVICE HAS ISSUED A

* TORNADO WARNING FOR...
EASTERN BANNER COUNTY IN THE PANHANDLE OF NEBRASKA
WESTERN MORRILL COUNTY IN THE PANHANDLE OF NEBRASKA
SOUTHEAST SCOTTS BLUFF COUNTY IN THE PANHANDLE OF NEBRASKA

THIS INCLUDES THE CITIES OF BAYARD...REDINGTON...MCGREW...
MELBEDA AND HARRISBURG

* UNTIL 615 PM MDT

* AT 536 PM MDT...LAW ENFORCEMENT OFFICIALS REPORTED SEVERAL
TORNADOES 3 MILES WEST OF REDINGTON...OR 32 MILES NORTHWEST OF
SIDNEY. THE SEVERE STORMS PRODUCING THE TORNADOES WERE MOVING TO
THE NORTHEAST AT 15 MPH.

THIS TORNADO WARNING REPLACES THE PREVIOUSLY ISSUED SEVERE
THUNDERSTORM WARNING FOR BANNER COUNTY.

THE SAFEST PLACE TO BE DURING A TORNADO IS IN A BASEMENT. GET UNDER A
WORKBENCH OR OTHER PIECE OF STURDY FURNITURE. IF NO BASEMENT IS
AVAILABLE...SEEK SHELTER ON THE LOWEST FLOOR OF THE BUILDING IN AN
INTERIOR HALLWAY OR ROOM SUCH AS A CLOSET. USE BLANKETS OR PILLOWS TO
COVER YOUR BODY AND ALWAYS STAY AWAY FROM WINDOWS.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY
WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE.

A SEVERE THUNDERSTORM WATCH REMAINS IN EFFECT UNTIL 1100 PM MDT
WEDNESDAY EVENING FOR THE PANHANDLE OF NEBRASKA. A SEVERE
THUNDERSTORM WATCH ALSO REMAINS IN EFFECT UNTIL 600 PM MDT WEDNESDAY

EVENING FOR THE PANHANDLE OF NEBRASKA.

LAT...LON 4158 10368 4146 10351 4176 10304 4194 10327

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Severe Weather Statement

Severe Weather Statements are issued to refine and update information on the threat of severe thunderstorms and tornados after the warning has been issued. It will have specifics on the timing and areal extent of any warnings in effect, as well as any basis or reports of severe weather. The Severe Weather Statement is also used to cancel all or part of any short-fused warnings or extend a Severe Storm watch for an hour or two.

Severe Weather Statement Example:

WUUS55 KCYS 250103

WYC001-250145-

BULLETIN - EAS ACTIVATION REQUESTED

SEVERE THUNDERSTORM WARNING

NATIONAL WEATHER SERVICE CHEYENNE WY

702 PM MDT FRI OCT 24 2003

...A SEVERE THUNDERSTORM WARNING REMAINS IN EFFECT FOR SOUTHEAST ALBANY COUNTY UNTIL 730 PM...

AT 657 PM MDT...WEATHER SPOTTERS REPORTED A SEVERE THUNDERSTORM NEAR AMES MONUMENT...OR ABOUT 15 MILES SOUTHEAST OF LARAMIE. SPOTTERS INDICATED ONE INCH DIAMETER HAIL. THE SEVERE STORM WAS MOVING TO THE NORTH AT 20 MPH.

IF SEVERE WEATHER APPROACHES YOUR AREA...GO INSIDE A STURDY SHELTER. LARGE HAIL AND HEAVY RAIN WILL BE ASSOCIATED WITH THIS STORM.

REPORT SEVERE WEATHER TO THE NEAREST LAW ENFORCEMENT AGENCY. THEY WILL RELAY YOUR REPORT TO THE NATIONAL WEATHER SERVICE.

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Short Term Forecast

The Short Term Forecast (NOW) covers expected weather conditions for the next 1 to 6 hours. Rather than restating the wording used in the Public Zone and State Forecast products, the NOW is more concise on when, where, and

what will happen. It uses geographical references (counties, cities, highways), starting and ending times of given weather, and what kind of weather will occur (snow changing to rain, thunderstorms with small hail, etc.). The NOW will be used as frequently as hourly during periods of rapidly changing weather.

The NOW is used similarly to the Special Weather Statements for events expected within the next 6 hours. The NOW does not replace watches, warnings or advisories products, but updated and specific information on expected conditions during certain watches, warnings and advisories will be handled in the NOW.

During warm season hazardous weather events, Short Term Forecast (NOW) products will provide frequent updates on expected weather conditions.

Note: Note: It is important for the media and emergency managers to monitor Short Term Forecast products since they are used with Special Weather Statements for many different types of expected hazardous weather.

Short Term Forecast Example:

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ZCZC CYSNOWCYS
FPUS75 KCYS 141333
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SHORT TERM FORECAST
NATIONAL WEATHER SERVICE CHEYENNE WY
633 AM MST FRI NOV 14 2003
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WYZ065-066-069-070-141500-
CHEYENNE FOOTHILLS-LARAMIE VALLEY-PINE BLUFFS-SOUTH LARAMIE RANGE-
INCLUDING THE CITIES OF...CHEYENNE...LARAMIE...PINE BLUFFS
633 AM MST FRI NOV 14 2003
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.NOW...
AN AREA OF SNOW SHOWERS WILL BE SPREADING SOUTH ACROSS THE
LARAMIE VALLEY...SOUTH LARAMIE RANGE AND LARAMIE COUNTY THROUGH
8 AM. SNOWFALL AMOUNTS WILL GENERALLY BE ON THE LIGHT SIDE...THOUGH
A FEW SPOTS EAST OF THE LARAMIE RANGE COULD RECEIVE ANOTHER ONE-HALF
INCH OF SNOW.
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Local Storm Report

Local Storm Report (LSR) products are used to relay information on severe or other significant storm events to the media, emergency managers, and other NWS offices. These reports enhance the credibility of warnings and provide documentation of the event. The report is issued as close to real time as possible. A set format is used for electronic decoding and processing of the information. The LSR is used to disseminate reports for short term (convective) and long term (winter) events.

Local Storm Report Example:

WWUS30 KCYS 250348

PRELIMINARY LOCAL STORM REPORT
 NATIONAL WEATHER SERVICE CHEYENNE, WY
 948 PM MDT FRI OCT 24 2003

TIME(MDT)	CITY LOCATION	STATE	EVENT/REMARKS
	COUNTY LOCATION		
0657 PM	16 SE LARAMIE	WY	1.00 INCH HAIL
10/24/00	ALBANY		
0705 PM	20 SE LARAMIE	WY	.75 INCH HAIL
10/24/00	ALBANY		HAIL FELL FROM 705 PM MDT UNTIL 712 PM MDT

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SPECIFIC WINTER WEATHER PRODUCTS

Winter Storm Outlooks are used to indicate that a hazardous weather event may develop more than 2 days in the future. A general indication of the expected type of hazardous weather is included, while the specific timing, amounts of snow or rain, snow level, wind speeds and other detailed information are not usually addressed. The product will also give a degree of uncertainty based on the forecasters experience and judgement.

Winter Storm Outlook Example:

WWUS35 KCYS 032245

WYZ059>070-041200-

SPECIAL WEATHER STATEMENT
 NATIONAL WEATHER SERVICE CHEYENNE WY
 345 PM MST TUE DEC 3 2002

A WINTER STORM SYSTEM WILL MOVE INTO THE PACIFIC NORTHWEST TONIGHT AND THEN INTO WYOMING WEDNESDAY. AS THE STORM MOVES CLOSE TO THE AREA...COLD ARCTIC AIR OVER SOUTHERN CANADA AND THE DAKOTAS WILL BEGIN TO MOVE SOUTH TOWARD NORTHERN WYOMING. LIGHT SNOW IS EXPECTED TO DEVELOP OVER MUCH OF WYOMING WEDNESDAY EVENING.

DEPENDING ON THE LOCATION OF THE LOW PRESSURE STORM SYSTEM BY WEDNESDAY MORNING ... SNOWFALL COULD BECOME HEAVY OVER PARTS OF CENTRAL AND SOUTHERN WYOMING ON WEDNESDAY. THE SNOW SHOULD TAPER OFF TO SNOW SHOWERS BY THURSDAY MORNING. THERE IS A CHANCE FOR

THE LOW TO MOVE TOO FAR SOUTH OF WYOMING FOR SIGNIFICANT SNOW...BUT THIS WOULD ALLOW FOR THE COLDER ARCTIC AIR TO MOVE SOUTH QUICKER WHICH WOULD STILL PRODUCE LIGHT SNOW OVER MUCH OF THE AREA.

SNOWFALL IS EXPECTED TO TAPER OFF TO LIGHT SNOW WEDNESDAY NIGHT AND END LATER THURSDAY MORNING. TEMPERATURES WILL BE MUCH COLDER NEXT WEEK WITH LOWS DROPPING TO 10 TO 20 BELOW ZERO AND HIGHS HAVING DIFFICULTY RISING OUT OF THE SINGLE DIGITS INTO THE TEENS. WIND CHILL VALUES OF 20 TO 30 BELOW ZERO MAY BE EXPERIENCED IN WINDY AREAS WITH AREAS OF BLOWING AND DRIFTING SNOW. TRAVEL MAY BECOME DIFFICULT ACROSS MUCH OF WYOMING WEDNESDAY AND THURSDAY.

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Winter Storm WARNING/WATCH (CYSWSWRIW) and Non-Precipitation WARNING/WATCH (CYSNPWRIW)

These products are used when the risk of a hazardous weather event (precipitation and non-precipitation) has increased significantly, but its occurrence, location, and/or timing are still uncertain. They are typically issued tweb (12) to 48 hours before an event for a Watch and zero (0) to twelve (12) hours for a warning. Some specific details are usually given and the degree of uncertainty will often be included.

WWUS45 KCYS 282249

URGENT - WINTER WEATHER MESSAGE
NATIONAL WEATHER SERVICE CHEYENNE WY
350 PM MST TUE JAN 28 2003

...WINTER WEATHER ADVISORY REMAINS IN EFFECT THIS EVENING FOR
EXTREME SOUTHEAST WYOMING AND THE SOUTHERN NEBRASKA PANHANDLE...

.A LOW PRESSURE SYSTEM WAS DEEPENING OVER EASTERN COLORADO THIS
AFTERNOON. THIS LOW WILL MOVE SLOWLY EAST OVERNIGHT INTO WESTERN
KANSAS. LIGHT SNOW WILL PERSIST OVER PARTS OF SOUTHEAST WYOMING
AND MUCH OF THE NEBRASKA PANHANDLE TONIGHT. TRAVEL MAY BE DIFFICULT
FROM THE SOUTHEAST CORNER OF WYOMING INTO THE SOUTHERN NEBRASKA
PANHANDLE DUE TO POOR VISIBILITY AND SNOW PACKED ROADS.

WYZ069-070-290600-
CHEYENNE FOOTHILLS-PINE BLUFFS-
INCLUDING THE CITIES OF...CHEYENNE...PINE BLUFFS
350 PM MST TUE JAN 28 2003

...WINTER WEATHER ADVISORY THIS EVENING...

LIGHT SNOW WILL CONTINUE OVER THE SOUTHEAST CORNER OF WYOMING
THIS EVENING WITH AN ADDITIONAL 1 TO 2 INCHES ACCUMULATING. THE

SNOW WILL SLOWLY TAPER OFF AFTER MIDNIGHT.

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WYZ066-290600-
SOUTH LARAMIE RANGE-
350 PM MST TUE JAN 28 2003

...WINTER WEATHER ADVISORY THIS EVENING...

LIGHT SNOW WILL INCREASE OVER THE SOUTHERN LARAMIE RANGE THIS
EVENING. ALTHOUGH SNOWFALL AMOUNTS WILL NOT BE AS HEAVY AS EARLIER
EXPECTED...UP TO 2 INCHES OF NEW SNOW WILL ACCUMULATE BY MIDNIGHT.

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NEZ019>021-054-055-290600-
BANNER-CHEYENNE-KIMBALL-MORRILL-SCOTTS BLUFF-
INCLUDING THE CITIES OF...BRIDGEPORT...HARRISBURG...KIMBALL...
SCOTTSBLUFF...GERING...SIDNEY
350 PM MST TUE JAN 28 2003

...WINTER WEATHER ADVISORY THIS EVENING...

LIGHT SNOW WILL CONTINUE OVER THE SOUTHERN HALF OF THE NEBRASKA
PANHANDLE THIS EVENING WITH UP TO 2 INCHES OF ADDITIONAL
ACCUMULATION.

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Non-Precipitation Example:

WWUS75 KCYS 301136

URGENT - WEATHER MESSAGE
NATIONAL WEATHER SERVICE CHEYENNE WY
436 AM MST THU JAN 30 2003

NEZ001>003-019>021-054-055-310000-
BANNER-BOX BUTTE-CHEYENNE-DAWES-KIMBALL-MORRILL-SCOTTS BLUFF-SIOUX-
INCLUDING THE CITIES OF...ALLIANCE...BRIDGEPORT...CHADRON...
HARRISBURG...HARRISON...KIMBALL...SCOTTSBLUFF...GERING...SIDNEY

...WIND ADVISORY FOR THE WESTERN NEBRASKA PANHANDLE TODAY...

A DEEP LOW PRESSURE SYSTEM OVER IOWA WILL CONTINUE TO PUSH SLOWLY

EAST TODAY...WHILE HIGH PRESSURE BUILDS INTO THE WEST COAST. THE LARGE DIFFERENCE IN PRESSURE BETWEEN THESE TWO SYSTEMS WILL RESULT IN VERY WINDY CONDITIONS ACROSS THE WESTERN PANHANDLE.

EAST TO WEST ORIENTED ROADS WILL BE THE MOST IMPACTED BY THE STRONG WINDS. IF YOU WILL BE TRAVELING ACROSS THE WESTERN PANHANDLE TODAY IN A LIGHTWEIGHT OR HIGH PROFILE VEHICLE...BE AWARE OF LOSS OF CONTROL THAT CAN RESULT FROM STRONG WINDS. ALSO BE PREPARED FOR BLOWING AND DRIFTING SNOW DIFFICULTIES...WITH SLICK ROADS IN SOME AREAS.

WYOMING WINTER WEATHER HIGHLIGHT CRITERIA

The following definitions will be used when deciding to issue various Winter weather highlights in Wyoming:

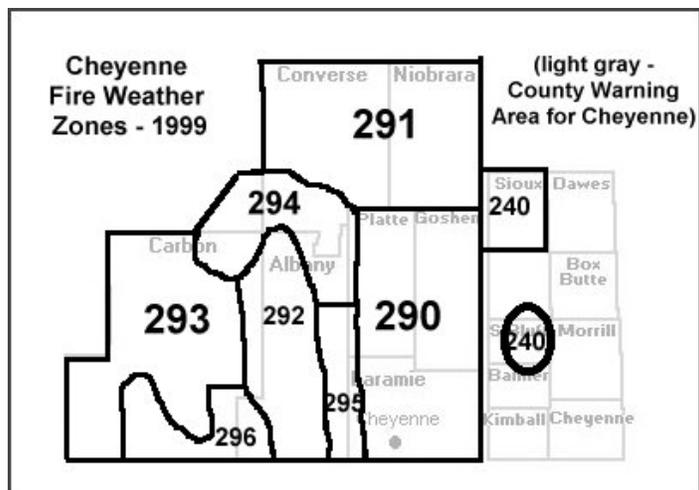
	Non-Mountain Areas	Mountain Areas(> 7000ft)
Snow Advisory	3"- 5" in 12 hours	5"- 8" in 12 hours
	5"- 8" in 24 hours	8"- 10" in 24 hours
Heavy Snow Warning	6"+ in 12 hours	8"+ in 12 hours
	8"+ in 24 hours	10"+ in 24 hours
Blizzard Warning	<ul style="list-style-type: none"> - conditions lasting 3 hours or more - sustained winds or frequent gusts to 35 mph or greater - visibility less than 1/4 mile due to considerable blowing and drifting snow. 	
Winter Storm	<ul style="list-style-type: none"> - any combination of winter precipitation and other weather elements (like wind) which do or potentially can result in: - a threat to life - a threat to property, and/or - more than just a minor impact of transportation or commerce 	
Wind Chill	(NPW) Warning - Wind Chill of -30 F with minimum wind of 10 MPH	
High Wind Warning (NPW)	Sustained 40 mph, gusts to 60 mph	Sustained 50 mph, gusts to 70 mph
Unless otherwise noted, the following Advisories/Warnings are issued as NPW's		
Sleet (WSW)	- Expected to cover the ground to a depth significant to motorists.	
Frost	(Advisory) - Temperature of 32 to 35 F.	
Freeze (advisory)	- Temperature of 28 to 32 F.	
Hard Freeze (advy)	- Temperature less than 28 F.	
Dense Fog	- Visibility of 1/4 mile or less lasting 2 hrs or more.	
Blowing Snow (WSW)	- Considerable blowing snow reducing visibilities and causing hazardous conditions.	

NEBRASKA WINTER WEATHER HIGHLIGHT CRITERIA

The following definitions will be used when deciding to issue various Winter weather highlights in NEBRASKA:

EVENT TYPE	All elevations
Snow Advisory (WSW)	3"- 5" in 12 hours
	5"- 8" in 24 hours
Heavy Snow Warning (WSW)	6"+ in 12 hours
	8"+ in 24 hours
Blizzard Warning	- conditions lasting 3 hours or more - sustained winds or frequent gusts to 35 mph or greater - visibility less than 1/4 mile due to considerable blowing and drifting snow.
Winter Storm (WSW)	- any combination of winter precipitation and other weather elements (like wind) which do or potentially can result in: - a threat to life - a threat to property, and/or - more than just a minor impact of transportation or commerce
Wind Chill(NPW)	ADVISORY - Wind Chill of -20 F with minimum wind of 10 MPH
	WARNING - Wind Chill of -30 F with minimum wind of 10 MPH
High Wind(NPW)	WARNING - Sustained 40 mph one hour or longer, gusts to 58 mph (any duration >
	ADVISORY - Sustained winds to 30 mph or higher for 1 hour or longer.
Unless otherwise noted, the following Advisories/Warnings are issued as NPW's	
Sleet(WSW)	- Expected to cover the ground to a depth significant to motorists.
Frost (Advsy)	- Temperature of 32 to 35 F.
Freeze (Advsy)	- Temperature of 28 to 32 F.
Hard Freeze (Advy)	- Temperature less than 28 F.
Dense Fog	- Visibility of 1/4 mile or less lasting 2 hrs or more.
Blowing Snow (WSW)	- Considerable blowing snow reducing visibilities and causing hazardous conditions.

FIRE WEATHER PRODUCTS



Basic meteorological services, including fire weather forecasts, warnings, and statements are available from the NWS in Cheyenne 24 hours a day. Narrative Fire Weather Forecasts are routinely issued seven days a week from June 1st to October 15th of each year. The morning narrative fire weather forecast shall be available by 07:00 each morning. The afternoon narrative fire weather forecast shall be available by 3:00 pm each afternoon. The morning narrative fire weather forecast may be issued in the Spring before June 1st and in the Autumn after October 15th due to unusual extreme fire conditions upon coordination between WFO Cheyenne and the Land Management Agencies. Non-routine or unscheduled products may be issued at any time as weather conditions can and do change rapidly. In general, services are provided without charge to land management agencies.

Fire Weather Forecast

The Fire Weather Forecast is issued either once a day or twice a day depending on the time of year. The Fire Weather Forecast consists of:

- Highlights as necessary
- Mixing Height
- Discussion
- Smoke Dispersal
- Forecast with highlights as necessary
- Haines Index
- Lightning Activity Level (LAL)
- 3 to 5 day extended forecast
- Transport Winds

Fire Weather Forecast Example:

FNUS55 KCYS 151035

FIRE WEATHER FORECAST FOR SOUTHEAST WYOMING AND NEBRASKA PANHANDLE
 NATIONAL WEATHER SERVICE CHEYENNE WY
 630 AM MDT WED SUN OCT 15 2003

...THIS IS THE FINAL FIRE WEATHER FORECAST THIS SEASON...

...MILDER AND DRIER CONDITIONS TODAY...

.DISCUSSION...TODAY WILL BE MILDER AND DRIER THAN TUESDAY AS A LOW PRESSURE TROUGH MOVES WELL EAST OF THE DISTRICT. ISOLATED SHOWERS ARE POSSIBLE THIS AFTERNOON OVER THE MOUNTAINS AND WESTERN ZONES AS

A WEAK UPPER LEVEL SHORTWAVE DISTURBANCE MOVES EAST OVER THE REGION. THURSDAY WILL BE DRY AND MOSTLY SUNNY WITH HIGH PRESSURE ALOFT AND AT THE SURFACE.

THE HAINES INDICES THIS MORNING WERE: 2 AT RAWLINS
2 AT CHEYENNE
2 AT SCOTTSBLUFF

FIRE WEATHER ZONES 290 291 SOUTHEAST AND EAST CENTRAL.
INCLUDING...CONVERSE...NIOBRARA...PLATTE...GOSHEN...LARAMIE COUNTIES.

.TODAY...

SKY/WEATHER...BECOMING PARTLY CLOUDY.
MAX TEMPERATURE...60 TO 65 BELOW 5000 FEET.
...55 TO 60 ABOVE 5000 FEET.
MIN HUMIDITY...26 TO 36 PERCENT.
WIND 20 FOOT...VARIABLE AROUND 10 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...12000 FEET.
TRANSPORT WIND...WEST 10 TO 20 MPH.
SMOKE DISPERSAL...BECOMING EXCELLENT.

.TONIGHT...

SKY/WEATHER...MOSTLY CLEAR.
MIN TEMPERATURE...26 TO 31.
MAX HUMIDITY...80 TO 90 PERCENT.
WIND 20 FOOT...VARIABLE 5 TO 10 MPH.

LAL... 1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...DECREASING TO LESS THAN 1000 FEET.
TRANSPORT WIND...WEST 8 TO 12 MPH.
SMOKE DISPERSAL...BECOMING POOR.

.THURSDAY...

SKY/WEATHER...MOSTLY SUNNY.
MAX TEMPERATURE...61 TO 66.
MIN HUMIDITY...22 TO 32 PERCENT.
WIND 20 FOOT...NORTHWEST TO WEST AROUND 10 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...INCREASING TO 12000 FEET.
TRANSPORT WIND...WEST 10 TO 20 MPH.
SMOKE DISPERSAL...BECOMING EXCELLENT.

FIRE WEATHER ZONES 292...293 LARAMIE VALLEY...CARBON COUNTY
INCLUDING...LARAMIE...RAWLINS...MEDICINE BOW

.TODAY...

SKY/WEATHER...BECOMING PARTLY CLOUDY WITH ISOLATED AFTERNOON
SHOWERS.

MAX TEMPERATURE...51 TO 56.

MIN HUMIDITY...26 TO 36 PERCENT.

WIND 20 FOOT...SOUTHWEST 10 TO 15 MPH.

LAL...1.

CHANCE OF WETTING RAIN (>0.10")...10 PERCENT.

MIXING HEIGHT(AGL)...12000 FEET.

TRANSPORT WIND...SOUTHWEST TO WEST 10 TO 20 MPH.

SMOKE DISPERSAL..BECOMING EXCELLENT.

.TONIGHT...

SKY/WEATHER...MOSTLY CLEAR.

MIN TEMPERATURE...24 TO 29.

MAX HUMIDITY...80 TO 90 PERCENT.

WIND 20 FOOT...VARIABLE 5 TO 10 MPH.

LAL...1.

CHANCE OF WETTING RAIN (>0.10")...NONE.

MIXING HEIGHT(AGL)...DECREASING TO LESS THAN 1000 FEET.

TRANSPORT WIND...SOUTHWEST TO WEST 8 TO 12 MPH.

SMOKE DISPERSAL...BECOMING POOR.

.THURSDAY...

SKY/WEATHER...MOSTLY SUNNY.

MAX TEMPERATURE...56 TO 61.

MIN HUMIDITY...20 TO 30 PERCENT.

WIND 20 FOOT...WEST AROUND 10 MPH.

LAL...1.

CHANCE OF WETTING RAIN (>0.10")...NONE.

MIXING HEIGHT(AGL)...INCREASING TO 12000 FEET.

TRANSPORT WIND...WEST 10 TO 20 MPH.

SMOKE DISPERSAL...BECOMING EXCELLENT.

FIRE WEATHER ZONES 294...295...296...
INCLUDING...MEDICINE BOW MOUNTAINS...SIERRA MADRE...LARAMIE RANGE

.TODAY...

SKY/WEATHER...BECOMING PARTLY CLOUDY WITH ISOLATED AFTERNOON
SHOWERS.

MAX TEMPERATURE...42 TO 52.
MIN HUMIDITY...35 TO 45 PERCENT.
WIND 20 FOOT...WEST TO NORTHWEST 10 TO 20 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...10 PERCENT.
MIXING HEIGHT(AGL)...INCREASING TO 11000 FEET.
TRANSPORT WIND...WEST 10 TO 20 MPH.
SMOKE DISPERSAL...BECOMING EXCELLENT.

.TONIGHT...

SKY/WEATHER...MOSTLY CLEAR.
MIN TEMPERATURE...18 TO 28.
MAX HUMIDITY...85 TO 95 PERCENT.
WIND 20 FOOT...DOWNSLOPE AROUND 10 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...DECREASING TO LESS THAN 1000 FEET.
TRANSPORT WIND...WEST 10 TO 15 MPH.
SMOKE DISPERSAL...BECOMING POOR.

.THURSDAY...

SKY/WEATHER...MOSTLY SUNNY.
MAX TEMPERATURE...45 TO 55.
MIN HUMIDITY...33 TO 43 PERCENT.
WIND 20 FOOT...UPSLOPE 10 TO 15 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...INCREASING TO 11000 FEET.
TRANSPORT WIND...WEST 10 TO 20 MPH.
SMOKE DISPERSAL...BECOMING EXCELLENT.

FIRE WEATHER ZONE 240...INCLUDING NEBRASKA NATIONAL FOREST AND THE
SCOTTS BLUFF NATIONAL MONUMENT

.TODAY...

SKY/WEATHER...BECOMING PARTLY CLOUDY.
MAX TEMPERATURE...60 TO 65.
MIN HUMIDITY...24 TO 34 PERCENT.
WIND 20 FOOT...WEST 5 TO 10 MPH.

LAL...1.
CHANCE OF WETTING RAIN (>0.10")...NONE.
MIXING HEIGHT(AGL)...INCREASING TO 12000 FEET.
TRANSPORT WIND...WEST 10 TO 15 MPH.

SMOKE DISPERSAL...BECOMING EXCELLENT.

.TONIGHT...

SKY/WEATHER...MOSTLY CLEAR.

MIN TEMPERATURE...30 TO 35.

MAX HUMIDITY...80 TO 90 PERCENT.

WIND 20 FOOT...VARIABLE 5 TO 10 MPH.

LAL...1.

CHANCE OF WETTING RAIN (>0.10")...NONE.

MIXING HEIGHT(AGL)...DECREASING TO LESS THAN 1000 FEET.

TRANSPORT WIND...WEST 10 TO 15 MPH.

SMOKE DISPERSAL...BECOMING POOR.

.THURSDAY...

SKY/WEATHER...MOSTLY SUNNY.

MAX TEMPERATURE...64 TO 69.

MIN HUMIDITY...21 TO 31 PERCENT.

WIND 20 FOOT...VARIABLE AROUND 10 MPH.

LAL...1.

CHANCE OF WETTING RAIN (>0.10")...NONE.

MIXING HEIGHT(AGL)...INCREASING TO 12000 FEET.

TRANSPORT WIND...WEST 10 TO 15 MPH.

SMOKE DISPERSAL...BECOMING EXCELLENT.

.EXTENDED FORECAST...

.TUESDAY THROUGH THURSDAY...DRY. LOWS IN THE 30S TO LOWER 40S.

HIGHS IN THE 60S TO LOWER 70S...MAINLY 50S MOUNTAINS.

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Spot Fire Forecast

The Spot Fire Forecast is used for both prescribed and ongoing wild fires. It is used anytime during the year and consists of the same parameters as the Fire Weather Forecast.

Spot Fire Forecast Example:

ZCZC CYSFWSCYS
FNUS75 KCYS 061505

SPOT FORECAST FOR UNIT 2 BURN.....USDA FOREST SERVICE
ISSUED BY NATIONAL WEATHER SERVICE NWFO CHEYENNE
805 AM MST THU NOV 6 2003

VALID UNTIL 605 PM MST WED NOV 6 2002
IF CONDITIONS BECOME UNREPRESENTATIVE, CONTACT THE NATIONAL WEATHER SERVICE.

DISCUSSION...NORTHWEST FLOW ALOFT WILL DOMINATE THE WEATHER AGAIN
TODAY WITH ONLY SOME HIGH LEVEL CLOUDS NOTED. A FLAT UPPER RIDGE OF
HIGH PRESSURE WILL BUILD OVER THE AREA TONIGHT AND FRIDAY KEEPING
SKIES MOSTLY CLEAR. TEMPERATURES WILL BE WARMER TODAY AND FRIDAY.

FOR PLANNED IGNITION TIME OF 735 MST 11/6/02

SKY / WEATHER.....MOSTLY SUNNY.
TEMPERATURE.....MAX 56.
RH.....MIN 25 TO 30 PERCENT.
20 FOOT WIND.....WEST 15 TO 25 MPH.
CWR.....ZERO PERCENT.
MIXING HEIGHT.....2000 FEET.
MIXING WINDS.....WEST TO NORTHWEST 15 TO 20 MPH.

FOR TONIGHT

SKY / WEATHER.....MOSTLY CLEAR.
TEMPERATURE.....MIN 26.
RH.....MAX 85 TO 90 PERCENT.
20 FOOT WIND.....SOUTHWEST 10 MPH.
CWR.....ZERO PERCENT.
MIXING HEIGHT.....500 FEET.
MIXING WINDS.....SOUTHWEST 10 MPH.

OUTLOOK FOR TOMORROW

SKY / WEATHER.....SUNNY.
TEMPERATURE.....MAX 62.
RH.....MIN 20 TO 25 PERCENT.
20 FOOT WIND.....WEST TO SOUTHWEST 10 TO 20 MPH.
CWR.....ZERO PERCENT.
MIXING HEIGHT.....2500 FEET.
MIXING WINDS.....SOUTHWEST 20 MPH.

FORECASTER...

NNNN

Rangeland and Grassland Forecasts: The Cheyenne WFO will be responsible for issuing the Southeast Wyoming Grassland Fire Danger Statement. This will be for the grasslands of western Nebraska.

ZCZC CYSRFD CYS
FXUS73 KCYS 240744

WYZXXX-XXX>XXX-XXX-XXXXXXX-232340-

SOUTHEAST WYOMING GRASSLAND FIRE DANGER STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE
600 AM MST SUN MAR 23 2003

THE GRASSLAND FIRE DANGER INDEX WILL BE IN THE VERY HIGH CATEGORY
ACROSS THE LOWER ELEVATIONS OF SOUTHEAST WYOMING THIS AFTERNOON.
THIS INCLUDES THE LOWER ELEVATIONS OF CARBON AND ALBANY
COUNTIES...AS WELL AS THE LOWER ELEVATIONS EAST OF THE LARAMIE RANGE.

HIGH TEMPERATURES THIS AFTERNOON SHOULD REACH INTO 50S WITH LOWEST
RELATIVE HUMIDITIES FROM 20 TO 30 PERCENT. SOUTH WINDS WILL BE
SHIFTING INTO THE SOUTHEAST AS WINDS INCREASE TO AROUND 10 TO 20
MPH.

USE CAUTION WITH FIRE AND SMOKING MATERIALS...ESPECIALLY IN GRASSY
AREAS.

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DAUGHERTY

Fire Weather Watch and Red Flag Warning (CYSRFWRIW)

Fire Weather Watches and Red Flag Warnings are a narrative discussion showing meteorological reasoning as to why heightened awareness is necessary to the end user. A Red Flag event occurs when critical weather patterns develop that could lead to large and dangerous fires. Conditions that warrant a Red Flag Watch or Warning, are combination of number 1 with two or more of the following:

1. Fire danger in the "very high" or "extreme" category.
2. Strong winds (usually 25 MPH or greater) or a dry and very unstable air mass (Haines Index 5 or 6).
3. Low humidities (15% or lower)
4. High temperatures (usually 80 degrees F. and above).
5. In the judgement of the forecaster, weather conditions and fire danger combine to indicate a severe fire weather episode.
6. General dry thunderstorm activity (LAL 6), i.e. considerable lightning but little or no measurable precipitation. If dry lightning is the only expected weather criteria, a fire weather watch shall be issued during the first period of the forecast.

Fire Weather Watch - will be issued by WFO Cheyenne for an entire zone or groups of zones whenever the potential for Red Flag conditions exists. A watch will normally be issued 12 to 36 hours in advance of the expected onset of Red Flag conditions. If dry lightning is the only condition expected in the 0 to 12 hour time frame, a Fire Weather Watch may be issued or continued in place of a Red Flag Warning. Red Flag Warning - will be issued by the Cheyenne office for an entire zone or groups of zones whenever Red Flag conditions are imminent or occurring. A

warning will generally be issued within 12 hours of the expected onset of Red Flag conditions, or whenever the forecaster becomes aware of an ongoing Red Flag event.

Fire Weather Watch Example:

WWUS85 CYSRFWRIW

FIRE WEATHER WATCH
NATIONAL WEATHER SERVICE CHEYENNE WY
605 PM MDT TUE SEP 9 2000

...A FIRE WEATHER WATCH IS IN EFFECT WEDNESDAY AFTERNOON FOR STRONG WINDS...LOW HUMIDITIES AND VERY DRY FUEL MOISTURES FOR FIRE WEATHER ZONES 290 AND 291

STRONG WINDS ARE EXPECTED TO DEVELOP WEDNESDAY AFTERNOON OVER SOUTHEAST WYOMING. AFTERNOON TEMPERATURES AT LOWER ELEVATIONS WILL WARM INTO THE UPPER 80S WHILE RELATIVE HUMIDITIES AT ALL ELEVATIONS WILL FALL BELOW 15%.

BY THURSDAY...TEMPERATURES WILL BE COOLER WITH RELATIVE HUMIDITY MINIMUMS OF 30 TO 40 PERCENT EXPECTED.

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Red Flag Warning Example:

WWUS85 CYSRFWRIW 101837

RED FLAG WARNING
NATIONAL WEATHER SERVICE CHEYENNE WY
1235 PM MDT TUE SEP 9 2000

...RED FLAG WARNING TODAY FOR WYOMING FIRE WEATHER ZONES 290 AND 291 FOR STRONG WINDS...AREAS OF LOW RELATIVE HUMIDITIES...AND VERY LOW FUEL MOISTURES...

ESTERLY FLOW ALOFT WILL DIRECT A COUPLE OF UPPER DISTURBANCES ACROSS SOUTHEAST WYOMING TODAY AND WEDNESDAY. THIS WILL INITIATE WINDY CONDITIONS TODAY. A COLD FRONT WILL REACH THE NORTHERN ZONES LATE THIS AFTERNOON THEN MOVE ACROSS MOST AREAS OVERNIGHT WITH COOLER AND LESS WINDY CONDITIONS FOLLOWING THE FRONT ON MONDAY.

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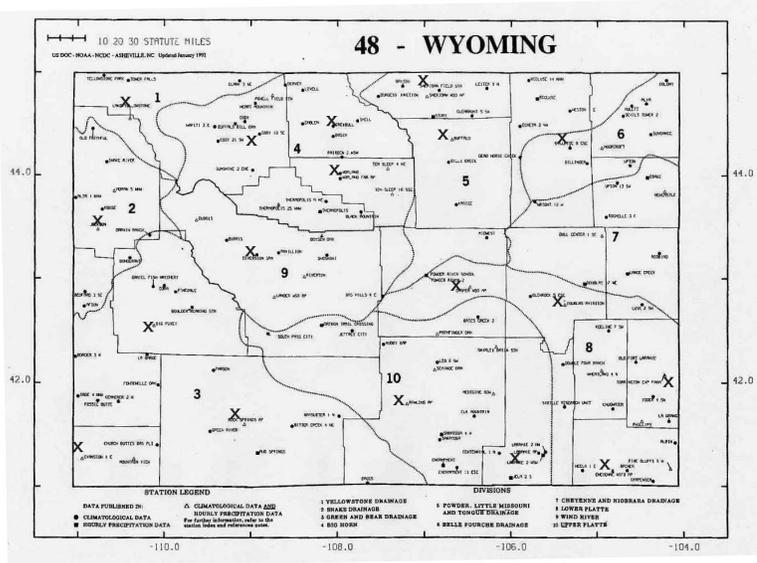
HYDROLOGIC PRODUCTS

Wyoming Hydrologic Drainage Basins

Mainstem River Flooding

The NWS in Cheyenne maintains an around-the-clock vigil of monitoring the major river systems in southeast Wyoming and western Nebraska. The office is also responsible for issuing watches and warnings to protect life and property when the threat of flooding occurs.

A variety of river stage, precipitation, snowpack and reservoir release information is routinely collected and monitored. This data is also compiled by three River Forecast Centers (RFCs) and is used to make river stage and flow forecast guidance. The river forecast center that services Cheyenne's county warning area is the Missouri Basin River Forecast Center (MBRFC) in Kansas City, MO.



Urban, Small Stream and Flash Flooding

On small streams, especially near the headwaters of river basins, water levels may rise quickly in heavy thunderstorms. Flash floods can begin before the rain stops falling. There is little time between the detection of flood conditions and the arrival of a flash flood crest. Swift action is essential to protect life and property.

Flash floods also occur in or near mountainous areas where torrential thunderstorm rains can quickly change a dry water course or small stream into treacherous torrents of water. Desert washes, particularly near mountains, can go from dry to flood within minutes as a result of thunderstorms many miles away from the flash flood site.

Urban flooding can occur in any populated area and it is particularly aggravated by urbanization where natural cover has been removed by the construction of buildings, roads, and parking lots. Heavy rains can result in flash flooding, inundating cars and causing considerable damage to residential and industrial properties.

The NWS is responsible for monitoring flash flood producing storms and will issue Flash Flood Watches and Warnings to areas where flooding is most likely to occur.

Mainstem River Flood Potential Outlook

The Flood Potential Outlook is issued as an advanced notice of the possibility of mainstem river flooding, usually based on forecast conditions 36-72 hours out. It is generally intended as a "heads up" notice for residents and local officials that some preliminary preparations should be made, but conditions are such that a Flood Warning is not yet warranted. Specific stage and crest forecasts will not be issued at this time.

As the flood threat increases, this product will be superseded by a Flood Watch and/or Flood Warning. If the flood threat diminishes, the Flood Potential Outlook will be canceled.

Mainstem River Flood Potential Outlook Example:

FGUS75 KCYS 241951
SPRING SNOWMELT FLOOD OUTLOOK
NATIONAL WEATHER SERVICE CHEYENNE WY
1250 PM MST MON MAR 24 2003

THIS FLOOD OUTLOOK ENCOMPASSES THE NORTH PLATTE RIVER AND ITS TRIBUTARIES IN SOUTHEASTERN WYOMING AND THE NEBRASKA PANHANDLE. IT ALSO INCLUDES THE LITTLE SNAKE RIVER DRAINAGE OF EXTREME SOUTH CENTRAL WYOMING.

ASSUMPTIONS

THIS OUTLOOK CONTAINS A GENERALIZED SUMMARY OF SPRING SNOWMELT FLOOD POTENTIAL. ABOVE NORMAL FUTURE SNOW ACCUMULATIONS COMBINED WITH HEAVY RAINS AND RAPID MELT WILL INCREASE THE CURRENT FLOOD POTENTIAL WHILE BELOW NORMAL FUTURE PRECIPITATION AND GRADUAL OR INTERMITTENT FREEZING AND THAWING WILL DECREASE THE MAGNITUDE OF THE CURRENT ASSESSMENT.

THESE PROJECTIONS OF RIVER STAGES AND RESERVOIR LEVELS ARE BASED UPON CURRENT OBSERVED STATES OF STREAMFLOW, SOIL MOISTURE, AND SNOWPACK, COUPLED WITH FUTURE PRECIPITATION AND TEMPERATURE PATTERNS AND ANTICIPATED OPERATIONAL HYDROLOGIC CHANGES SUCH AS RESERVOIR RELEASES AND CANAL DIVERSIONS. "OUTLOOKS" ARE PROVIDED FOR LONG-RANGE (WEEKS TO MONTHS) PROJECTIONS BASED ON CLIMATOLOGICAL PATTERNS OF PRECIPITATION AND TEMPERATURE. THE UNCERTAINTY OF THESE PRODUCTS VARIES FROM SEASON TO SEASON AND FROM SITE TO SITE. IN RECENT YEARS OUTLOOK CRESTS HAVE BEEN ABOVE THE OBSERVED CREST ABOUT AS OFTEN AS THEY HAVE BEEN BELOW. THE UNCERTAINTY OF FORECASTS TEND TO BE LESS THAN THE UNCERTAINTY OF OUTLOOKS DUE TO THEIR SHORTER LEAD TIMES. USERS OF THESE PRODUCTS ARE ENCOURAGED TO CONTACT THEIR NEAREST NATIONAL WEATHER SERVICE OFFICE FOR CONTINUED UPDATES OF METEOROLOGICAL CONDITIONS WHICH CAN HAVE SIGNIFICANT IMPACTS UPON FLOOD PLANNING AND FLOOD FIGHTING ACTIVITIES.

CURRENT SNOW CONDITIONS

AS OF THIS DATE MOUNTAIN SNOWPACKS IN THE SOUTHEASTERN PORTION OF WYOMING ARE BELOW NORMAL IN TERMS OF AVERAGE SNOW WATER EQUIVALENT

(SWE). THE UPPER NORTH PLATTE RIVER BASIN (THAT AREA ABOVE PATHFINDER RESERVOIR) REPORTED AN AVERAGE OF 96%...WHILE THE LOWER NORTH PLATTE REPORTED 85% AND THE LITTLE SNAKE BASIN 89%. THESE AMOUNTS ARE CLOSE TO THE 1999 VALUES REPORTED FOR THIS DATE WHEN THE UPPER N. PLATTE RECORDED 89% OF AVERAGE...THE LOWER N. PLATTE 89%...AND THE LITTLE SNAKE 88%.

VALLEY SNOWCOVER (BELOW 6000 FT MSL) CONTINUES TO BE SPARSE IN SOUTHEASTERN WYOMING AND THE NEBRASKA PANHANDLE. RECENT SNOWSTORMS HAVE PRODUCED SIX TO TWELVE INCH AMOUNTS DURING THE PAST WEEK FOR PORTIONS OF THIS AREA...BUT THE MAJORITY OF THAT SNOW HAD MELTED BY TODAY.

CURRENT SOIL MOISTURE CONDITIONS

THE SEVERAL SNOWSTORMS THAT HAVE MOVED ACROSS THE PANHANDLE AND SOUTHEASTERN WYOMING OVER THE LAST SEVERAL WEEKS HAVE CONTRIBUTED ENOUGH MOISTURE TO RAISE SOIL MOISTURE VALUES TO NORMAL ACROSS THE REGION.

CURRENT RIVER CONDITIONS

SEASONABLE TEMPERATURES AT ELEVATION...AND THE LACK OF VALLEY SNOWCOVER CONTINUES TO KEEP THE SNOWPACK IN PLACE ACROSS THE HIGHER TERRAIN OF SOUTHEASTERN WYOMING. AS A RESULT ALL RIVERS AND STREAMS DRAINING THE MOUNTAINS AND PANHANDLE CONTINUE TO FLOW AT THEIR SEASONAL LOW LEVELS.

SPRING SNOWMELT FLOOD OUTLOOK

TO DETERMINE THE FLOOD POTENTIAL OF THIS RUNOFF YEAR CLIMATOLOGICALLY AVERAGE PRECIPITATION AND TEMPERATURES ARE COMBINED WITH CURRENT SNOW WATER EQUIVALENT AMOUNTS. THE OUTLOOK FOR THE MAY-JUNE RUNOFF PERIOD DOES NOT EXPECT FLOODING IN THE MOUNTAINS OF SOUTHEASTERN WYOMING OR THE PANHANDLE DUE TO SNOWMELT.

ONE SHOULD REMEMBER...HOWEVER...THAT THERE REMAINS AMPLE TIME FOR SNOW TO ACCUMULATE AND FOR CONDITIONS TO CHANGE. THE PRECIPITATION AND TEMPERATURE REGIMES THAT DEVELOP DURING THE NEXT TWO MONTHS WILL ULTIMATELY DETERMINE THE TRUE POTENTIAL FOR HIGH WATER DURING THE 1999-2000 RUNOFF SEASON.

NNNN

Mainstem River Flood Watch

A Flood Watch is issued when mainstem river flooding is expected within 36 hours. The watch indicates that flooding is possible, but not imminent, within the geographical area covered by the watch. Any additional information, or a cancellation of the Watch, will be issued using a Flood Statement. When flooding is occurring or imminent, the watch will be upgraded to a Flood Warning.

Mainstem River Flood Watch Example:

FFACYS

WYZ059-0101200-

BULLETIN - IMMEDIATE BROADCAST REQUESTED

FLOOD WATCH

NATIONAL WEATHER SERVICE CHEYENNE WY

600 AM MDT WED OCTOBER 8 2003

THE NATIONAL WEATHER SERVICE IN CHEYENNE HAS ISSUED A FLOOD WATCH FOR A PORTION OF EAST CENTRAL WYOMING UNTIL 600 AM MDT THURSDAY MORNING.

AT 535 AM MDT CONVERSE COUNTY EMERGENCY MANAGEMENT OFFICIALS REPORTED LARGE WITHIN BANK RISES ALONG THE NORTH PLATTE RIVER NEAR GLENROCK. THESE RISES WERE IN RESPONSE TO HEAVY RAINS THAT HAVE OCCURRED IN THE AREA THE LAST SEVERAL DAYS.

DOWNSTREAM INTERESTS ALONG THE NORTH PLATTE FROM DOUGLAS THROUGH ORIN SHOULD PREPARE FOR MUCH HIGHER RIVER LEVELS FOR THE NEXT FEW DAYS. ALTHOUGH THE RIVER IS CURRENTLY FORECAST TO REMAIN WITHIN BANKS...ISOLATED AFTERNOON THUNDERSTORMS REMAIN LIKELY THROUGH FRIDAY...WITH ANY SUBSTANTIAL RAINS RESULTING IN EVEN HIGHER RIVER LEVELS.

REMAIN ALERT TO THE EFFECTS OF THESE STORMS ON THE RIVER...AND BE PREPARED TO QUICKLY MOVE TO HIGHER GROUND SHOULD A FLOOD WARNING BE ISSUED.

NNNN

Mainstem River Flood Warning (CYSFLWRIW)

A Flood Warning is issued to warn the public of flooding along larger streams and rivers which pose a threat to life or property. This product will usually contain current river stages, flood stages and forecasted crest stages. Updated information, or a cancellation of the warning, will be issued using a Flood Statement.

Mainstem River Flood Warning Example:

TTAA00 KCYS 292010

NEC105-300010-

BULLETIN - EAS ACTIVATION REQUESTED

FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE CHEYENNE WY
209 PM MDT TUE JUL 29 2003

THE NATIONAL WEATHER SERVICE IN CHEYENNE HAS ISSUED A

* FLASH FLOOD WARNING FOR...KIMBALL COUNTY IN THE NEBRASKA PANHANDLE

* UNTIL 610 PM MDT

* AT 205 PM MDT... NATIONAL WEATHER SERVICE DOPPLER RADAR INDICATED A THUNDERSTORM WITH VERY HEAVY RAIN FROM KIMBALL TO 18 MILES SOUTHWEST OF KIMBALL... MOVING SLOWLY EAST.

* A USAF SITE IN THIS AREA RECORDED 1.32 INCHES OF RAIN SINCE 1 PM. DOPPLER RADAR ESTIMATES MORE THAN 4 INCHES OF RAIN 14 MILES SOUTHWEST OF KIMBALL SINCE 1230 PM.

DO NOT DRIVE THROUGH FLOODED AREAS. SHALLOW...SWIFTLY FLOWING WATER CAN WASH A CAR FROM A ROADWAY. ALSO...THE ROADBED MAY NOT BE INTACT UNDER THE WATER.

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Mainstem River Flood Statement (CYSFLSRIW)

This is a follow-up product to provide additional or updated information on an existing Flood Watch or Flood Warning. Flood Statements will be issued until all rivers in flood are below flood stage, and will then be used to cancel the Watch/Warning.

Mainstem River Flood Statement Example:

CYSFLSRIW
TTAA00 KRIW 101830
WYZ020-121800-

? TTAA00 KCYS 151241
NEZ019-151330-

FLOOD STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE WY
640 AM MDT SUN JUN 15 2003

...FLOOD WARNING FOR SOUTH CENTRAL SCOTTS BLUFF COUNTY ALLOWED TO EXPIRE...

THE FLOOD WARNING FOR SOUTH CENTRAL SCOTTS BLUFF COUNTY WAS ALLOWED TO EXPIRE AT 600AM.

MOST OF THE FLOODING...WHICH OCCURRED SATURDAY EVENING AS A RESULT OF VERY HEAVY THUNDERSTORM RAINFALL...HAS SUBSIDED. SOME COUNTY ROADS CONTINUED TO HAVE FOUR TO SIX INCHES OF WATER ON THEM. TRAVELERS ARE URGED TO USE CAUTION IF THEY ENCOUNTER FLOODED ROADS.

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Mainstem River Statement (CYSRVSRW)

A River Statement is issued to provide the public with information on a significant hydrologic event that does not involve actual mainstem river flooding.

Mainstem River Statement Example:

FGUS85 KCYS 031947
WYZ059-061>063-065-068-NEZ019-021-041900-

RIVER STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE, WY
145 PM MDT THU APR 03 2003

LOCATION	FLOOD STAGE (FT)	OBSERVED STAGE (FT)	FORECAST 7AM		
			FRI	SAT	SUN
LARAMIE RIVER BASIN					
WOODS LANDING	06	1.1 MON 06 AM	1.1	1.2	1.4
LARAMIE	05	0.0 MON 09 AM	0.5	0.5	0.5
BOSLER	08	MSG MSG	1.1	1.0	1.0
FORT LARAMIE	07	2.2 MON 06 AM	2.3	2.3	2.3
LOWER NORTH PLATTE BASIN (IN WY)					
GLENROCK	10	2.2 MON 08 AM	2.2	2.3	2.2
ORIN	07	4.4 MON 06 AM	4.4	4.4	4.5
LOWER NORTH PLATTE BASIN (IN NE)					
HENRY	05	1.3 MON 05 AM	1.3	1.3	1.3
MITCHELL	07	MSG MSG	0.7	0.7	0.7
MINATARE	07	MSG MSG	1.7	1.7	1.7
BRIDGEPORT	10	E2.4 MON 06 AM	2.4	2.4	2.4
LITTLE SNAKE RIVER BASIN					
DIXON	11	MSG MSG	4.1	4.1	4.9

MEDICINE BOW RIVER BASIN
HANNA 06 2.8 MON 09 AM 2.8 2.8 2.8

UPPER NORTH PLATTE BASIN
SARATOGA 08 4.2 MON 06 AM 4.2 4.3 4.5

LISTEN FOR UPDATED RIVER AND STREAM INFORMATION BY TUNING TO NOAA
WEATHER RADIO OR YOUR LOCAL NEWS MEDIA....

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Flash Flood Watch

A Flash Flood Watch is issued to raise the awareness of the potential of flash flooding within the next 36 hours, although it normally issued no more than 24 hours in advance of the expected onset of flooding. It is also issued for rivers when official notice has been received of a potential, but not imminent, dam break.

Flash Flood Watch Example:

WGUS65 KCYS 180357
WYZ059-067-181040-

BULLETIN...IMMEDIATE BROADCAST REQUESTED
FLASH FLOOD WATCH
NATIONAL WEATHER SERVICE CHEYENNE WY
956 PM MDT SAT MAY 17 2003

...A FLASH FLOOD WATCH IN EFFECT FOR THE REMAINDER OF TONIGHT FOR
SOUTHERN CONVERSE COUNTY AND ALL OF PLATTE COUNTY...

THE NATIONAL WEATHER SERVICE HAS ISSUED A FLASH FLOOD WATCH FOR
SOUTHERN CONVERSE COUNTY AS ALL OF PLATTE COUNTY FOR THE
REMAINDER OF TONIGHT.

DOPPLER RADAR PRECIPITATION PRODUCTS INDICATE MANY AREAS HAVE
RECEIVED MORE THAN THREE INCHES OF RAIN. IN ADDITION THERE HAVE
ALSO BEEN SEVERAL REPORTS FROM THE PUBLIC OF HEAVY RAIN.

FLOODING HAS BEEN REPORTED ALONG LA BONTE AND LA PRELE CREEKS IN
CONVERSE COUNTY AND MANY COUNTY ROADS HAVE BEEN WASHED OUT IN
PLATTE COUNTY.

RAIN IS EXPECTED TO SLOWLY CHANGE TO SNOW WHICH SHOULD HELP IN THE
ENDING OF THE FLOODING PROBLEMS BUT WITH ALL THE RAIN THAT HAS
ALREADY FALLEN THE FLOODING MAY CONTINUE FOR SEVERAL MORE HOURS.

REMEMBER MOST DEATHS CAUSED BY FLASH FLOODING OCCUR AT NIGHT. DO
NOT DRIVE ACROSS FLOODED ROADWAYS.

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Flash Flood Warning

A Flash Flood Warning is issued for short-fused (usually less than 6 hours) significant or possible life threatening flooding. It applies to whole geographical areas within counties or parts of counties. In many instances it may be combined with a Severe Thunderstorm Warning if the heavy rainfall is associated with a strong convective storm. Most of the time no stages or crests are included, as flash flooding generally occurs on small streams or creeks where no river gage is available or no historical data exist for that site. It is also used to give notice of dam breaks where failure has occurred or is imminent.

Flash Flood Warning Example:

WGUS55 KCYS 160544
WYC021-160830-

BULLETIN - EAS ACTIVATION REQUESTED
FLASH FLOOD WARNING
NATIONAL WEATHER SERVICE CHEYENNE WY
1145 PM MDT FRI AUG 15 2003

THE NATIONAL WEATHER SERVICE HAS EXTENDED THE

* FLASH FLOOD WARNING FOR...
WESTERN LARAMIE COUNTY ESPECIALLY CROW CREEK

* UNTIL 200 AM MDT

* AT 1130 PM MDT...LAW ENFORCEMENT PERSONNEL REPORTED NORTHERN CROW
CREEK OUT OF ITS BANKS NEAR COUNTY ROAD 109 IN THE WESTERN PART OF
THE COUNTY. LIGHTER RAINS HAVE CONTINUED ACROSS THIS AREA...
WITH RUNOFF FROM PREVIOUS HEAVY RAINS CREATING THE MOST PROBLEMS.
OTHER FLOODING PROBLEMS WERE STILL REPORTED ON PARTS OF HAPPY JACK
ROAD.

THE RUNOFF INTO THE CREEK SHOULD GRADUALLY DIMINISH OVER THE NEXT
FEW HOURS...BUT THE CREEK WILL REMAIN HIGH AND OUT OF ITS BANKS OVER
THE WESTERN PART OF THE COUNTY. IF YOU LIVE IN A FLOOD PRONE AREA
ALONG CROW CREEK TO THE WEST OF CHEYENNE...BE PREPARED TO MOVE TO
HIGHER GROUND IF NECESSARY.

TO REPORT SEVERE WEATHER HAVE THE NEAREST LAW ENFORCEMENT AGENCY
RELAY YOUR REPORT TO THE NEAREST NATIONAL WEATHER SERVICE.

LAT...LON 4156 10522 4105 10519 4106 10487 4158 10482

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Flood Statement

A Flood Statement is used to provide additional information for an existing Flash Flood Watch or Warning, Flood Watch or Warning and Urban and Small Stream Flood Warning or Advisory. It is also utilized to eliminate a portion of the geographical area(s) affected by a Watch, Warning or Advisory or to cancel the Watch, Warning or Advisory

completely. If additional areas are expected to be affected, a new Watch, Warning or Advisory will be issued to include these areas.

Flood Statement Example:

TTAA00 KCYS 151241
NEZ019-151330-

FLOOD STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE WY
640 AM MDT SUN JUN 15 2003

...FLOOD WARNING FOR SOUTH CENTRAL SCOTTS BLUFF COUNTY ALLOWED TO
EXPIRE...

THE FLOOD WARNING FOR SOUTH CENTRAL SCOTTS BLUFF COUNTY WAS ALLOWED TO
EXPIRE AT 600AM.

MOST OF THE FLOODING...WHICH OCCURRED MONDAY EVENING AS A RESULT OF
VERY HEAVY THUNDERSTORM RAINFALL...HAS SUBSIDED. SOME COUNTY ROADS
CONTINUED TO HAVE FOUR TO SIX INCHES OF WATER ON THEM. TRAVELERS ARE
URGED TO USE CAUTION IF THEY ENCOUNTER FLOODED ROADS.

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WGUS75 KCYS 160800
WYZ069-160820-

FLASH FLOOD STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE WY
200 AM MDT SAT AUG 16 2003

...FLASH FLOOD WARNING FOR WESTERN LARAMIE COUNTY HAS BEEN ALLOWED
TO EXPIRE...

AT 150 AM MDT...LAW ENFORCEMENT PERSONNEL REPORTED NORTHERN CROW
CREEK WAS WITHIN ITS BANKS AND IS NO LONGER COVERING ROADWAYS.
ONLY SOME LINGERING LIGHT RAIN SHOWERS WERE OCCURRING ACROSS WESTERN
LARAMIE COUNTY...WITH NO FURTHER FLASH FLOODING EXPECTED.

TO REPORT SEVERE WEATHER HAVE THE NEAREST LAW ENFORCEMENT AGENCY
RELAY YOUR REPORT TO THE NEAREST NATIONAL WEATHER SERVICE.

LAT...LON 4156 10522 4105 10519 4106 10487 4158 10482

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Urban and Small Stream Flood Advisory

An Urban and Small Stream Flood Advisory is issued when significant, prolonged flooding of streets, underpasses, basements, etc. are expected due to heavy precipitation and/or rapid snowmelt. Also flooding may occur on small

creeks and streams where no significant property damage is expected, but may pose some public inconvenience.

Urban and Small Stream Flood Advisory Example:

ZCZC CYSFFSCYS
TTAA00 KCYS 260356
NEZ055-260430-

URBAN AND SMALL STREAM FLOOD STATEMENT
NATIONAL WEATHER SERVICE CHEYENNE WY
955 PM MDT FRI JUL 25 2003

...THE URBAN AND SMALL STREAM FLOOD ADVISORY FOR PARTS OF CHEYENNE
COUNTY WILL END AT 10 PM...

REPORTS FROM CHEYENNE COUNTY INDICATE THAT THE WATER WAS RECEDING
AND THE FLOODING THREAT WAS DECREASING. HIGHWAY 30 BETWEEN SIDNEY
AND LODGEPOLE WAS REOPENED AROUND 945 PM. THEREFORE...THE FLOOD
ADVISORY FOR CENTRAL AND SOUTHERN CHEYENNE COUNTY WILL BE ALLOWED TO
END AT 10 PM.

HOWEVER...RESIDENTS LIVING ALONG LODGEPOLE CREEK...ESPECIALLY IN THE
EASTERN PART OF THE COUNTY...SHOULD REMAIN ALERT TO RISING WATERS ON
THE CREEK. ALL THE RUNOFF FROM TODAY/S RAIN WILL HAVE TO FLOW EAST
VIA LODGEPOLE CREEK...AND IT WILL TAKE SOME TIME TO GET THIS MUCH
WATER DOWNSTREAM. HIGH WATER ON THE CREEK CAN BE EXPECTED TO LINGER
INTO SUNDAY MORNING BEFORE SLOWLY FALLING.

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